Volunteer Firemen

JULY

1945

NATIONAL FIRE PROTECTION ASSOCIATION
INTERNATIONAL
60 Batterymarch Street Boston 10, Massachusetts

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CONSIDER WARD LAFRANCE FIRST

SHORT TURNING RADIUS

Front axles have exceptionally wide tread, providing high wheel deflection. This assures short turning radii so essential in communities having narrow streets.

NEEDLE BEARING DRIVE SHAFTS

Drive shaft construction reduces friction to a minimum. The type of joints used are designed to provide efficient power transmission even under high angular alignment.

POWERFUL SIX-CYLINDER ENGINE

Every piece of apparatus is equipped with a heavy-duty six-cylinder engine designed for actual use of rated horsepower and built especially for fire service.

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Steering gear is mounted on the top of the frame for ready removal. Gear sizes are proportionate to the weight and tire sizes on the front axle system.

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Side rails are made from highest-quality pressed steel. The extra width flange provides an unusually strong frame rail and increases load-carrying capacity.

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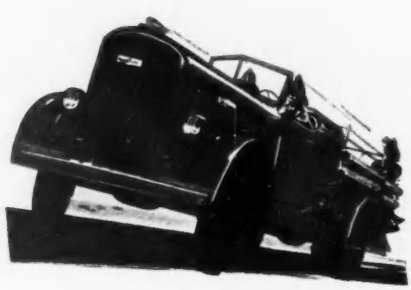
Upper halves of the pump and transmission case are bolted to the lower half by one horizontal flange only. Can be disassembled in the chassis.

WARD LAFRANCE

TRUCK DIVISION

GREAT AMERICAN INDUSTRIES, INC.

ELMIRA GAI **NEW YORK**



THE NO. 1 BUY IN FIRE APPARATUS

Fire Fighting Blizzard

by

NATIONAL FOAM

Fire is unpredictable—like the weather, but there is nothing uncertain about the man-made "blizzards" of tough, clinging, fire-smothering foam produced by National Foam. It's there when and where you want it — as a gas-tight blanket of Aer-O-Foam — to snuff out flames and prevent flashbacks.

The U. S. Navy calls Aer-O-Foam "bean soup"—with respect. Easily and quickly applied, it is a veritable blizzard of thick, tenacious bubbles smothering the immediate surface afire — without interference with other activities.

Fire strikes in season and out. Aer-O-Foam "blizzards" are available the year around.

IN FIRE DEPARTMENT SERVICE

National Foam System has equipment especially designed for use of Fire Departments to meet all types of foam fire fighting requirements.

BACK THE ATTACK
BUY WAR BONDS

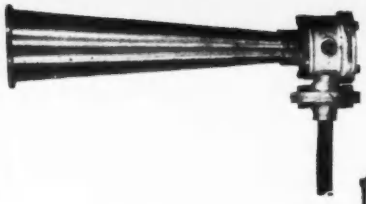
Beginning of a Foam Blanket suggests an early snowfall.

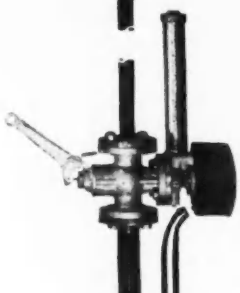
NATIONAL FOAM SYSTEM, INC.

SPECIALIZING IN FOAM FIRE PROTECTION

Packard Building, Philadelphia 2, Pa.

A Complete
ALARM SYSTEM
For Volunteer Fire Departments





THE GAMEWELL FIRE ALARM SYSTEM, designed especially for the smaller communities is characterized by its reliability, simplicity, low initial and maintenance costs — and Speed.

THE DIAPHONE HORN provides coded signals *directing your firemen to the scene of fire* — or your own siren or other public alarm may be utilized.

DIAPHONE HORN
Operated by Compressed Air
The Circuit is shown connected with the Electric Control Valve.

Installation is simple — we supply complete directions.

Write for new Booklet
"It Can Happen Here"

GAMEWELL FIRE ALARM BOXES
Connected In Series
In Closed Metallic Circuit

110 VOLT A.C.

GAMEWELL CONTROL UNIT
VITAGUARD SYSTEM
With Self-Winding Register — Manual Transmitter for Sounding Alarms Received By Telephone — Control Switches — Test Switches and Instruments — Batteries, Rectifiers and Line Terminals Mounted Within the Cabinet.

THE GAMEWELL COMPANY
Newton Upper Falls, Massachusetts
In Canada — NORTHERN ELECTRIC CO., LTD. — Montreal

Volunteer Firemen

VOLUME 12 NUMBER 7

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PUBLISHED BY
NATIONAL FIRE PROTECTION ASSOCIATION
60 BATTERYMARCH ST., BOSTON 10, MASS.
A VOLUNTARY NON-PROFIT ORGANIZATION

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THE VOLUNTEER FIREMAN

TYPICAL of fast burning amusement resort properties was the skating rink fire at Dayton, Ohio, shown on the cover.

"Let 'Er Burn"?

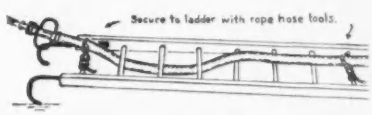
FOR the real fireman every blaze is a challenge and must be fought until it is dead out. Even where the fire has such headway upon arrival that there is little likelihood of saving the structure and when no nearby property is threatened, the fire department likes to put the blaze out with alacrity. By so doing, they serve notice that had they been called in time there could have been no question that they would have controlled the outbreak with minimum loss. The indifferent "let-the-ruins-burn attitude" must only be used when every vestige of the property is beyond saving and when a clean cellar hole is to be prefered to a mass of dangerous debris that will only prove an "attractive nuisance" to children and an eyesore to the community.

How Much Risk?

IN all fire fighting operations the officers should exercise judgment as to the type of fire fighting employed. Men are willing to take risks — very considerable risks — to save life. They accept a reasonable degree of hazard to save valuable property. However, there are too many cases where the lives and well-being of firemen are jeopardized in a fire fighting operation that cannot have any profitable conclusion. There are still fire departments that advance lines beneath dangerous walls and tottering roof of some old burned out hulk of a building that is a total loss anyway. In such cases it may be much more desirable to drown out the fire from the outside with heavy streams and then pull down the remaining debris with hooks and lines. We do not have enough manpower these days to waste in the manner of the old-time chief with his horse-drawn apparatus who shouted "never mind the men, we can get more men, but save the horses." Some of that same attitude perhaps has been unconsciously carried over into present-day fire fighting.

A fire occurs in a dirty old junk yard and shop. The yard is so congested that there is not even a clear footpath. All sorts of iron parts of autos, stoves, and furniture are indescriminately piled with a mixture of such combustibles as old cushions, mattresses, rags. The building itself is in an unsafe condition. The blaze has good headway and has buried itself deeply in the years-old piles of discarded junk. The proper procedure would be to surround the fire with heavy streams and drown it out with a minimum of manpower. Instead, a 2½-inch line is run into the yard over piles of junk and the fire fought at close quarters. The man at the pipe loses his footing on a pile of old auto brake drums and, still hanging to the pipe, is thrown down against a pile of debris before the lieutenant can shut off the pipe. Fortunately the injuries are not critical but, as one of the men put it afterward, "that dirty old junk yard is not even worth a cut finger," and it would be very easy to get a fractured skull.

If the department has a wagon pipe or deluge set that could be set up in the driveway the burning junk could be effectively flooded until the fire is under control. Any overhauling would be done with easy-to-handle 1½-inch lines. Even if a department does not have a heavy stream device there is usually a pipe holder available, or the line can be secured to a pole or a short ladder used to improvise a pipe holder.



Charged lines are always dangerous and can never be used in a carefree manner by even the most experienced hosemen. They should be secured wherever possible. Also at every fire care must be taken to avoid needless injuries, such as nail punctures in feet, blows from falling debris, or cuts and bruises which needlessly incapacitate men who cannot be spared in these days of manpower shortages.

THE United States fire losses for the month of May were $34,153,000, according to the National Board of Fire Underwriters. This figure is 4 per cent more than for the same month last year.

The fire losses for the year ending in May, 1945, were $439,342,000, as compared with $400,072,000 for the same twelve months' period in May, 1944. The revised estimate of U. S. fire losses for 1944 is $437,273,000.

Canadian fire losses during May, as estimated from the fire records of the *Chronicle* of Montreal, dropped to $1,750,000. This was a 22 per cent decrease from the April figure of $2,250,000.

For low water pressure
and broken mains in Tokyo
— BUY BONDS!

The heading of this article is from the cover of an attractive historical booklet by the Pikesville Volunteer Fire Company.

Report by W. A. Chenoweth, President
Pikesville Volunteer Fire and Ambulance Service Company

FEBRUARY, 1897, saw the organization of the Pikesville Volunteer Fire Company, Baltimore County, Maryland. Today the company is one of the oldest and most active members of the Maryland State Volunteer Fire Association, which they joined in 1899. The company operates on a limited charter, only 150 members may appear on the active membership list. There are, however, honorary members, on a list that is not limited.

Baltimore County is one of the few counties in the country that has a completely paid department, including a chief, an assistant chief, and 13 engine companies spotted around the county. The department is on the 2-platoon system. Each company has a captain and 3 men on a shift.

When Baltimore annexed portions of the county in 1919, Pikesville remained outside the city. The county fire department had to build new engine houses and Pikesville was picked as the site of one of these new houses. The Pikesville Volunteer Fire Company was given quarters in the new engine house along with the paid company, and has shared quarters ever since.

Since 1919, the volunteers have worked with and been under the direction of the captain or the man in charge of Engine No. 2. with whom they are stationed. Some of the men attached to Engine No. 2 also belong to the volunteer company. The volunteers have a working agreement with the Chief of the paid department that in case of accident or emergency call, and no volunteer driver is immediately available for the ambulance, the captain or acting man in charge of No. 2 can detail a man from the paid company to drive.

The volunteer company is listed on the running chart like a paid department although the volunteers serve entirely without compensation. The volunteer company answers certain fire alarm boxes with the paid firemen and responds to all building fires on a "silent" alarm, using the engine house as the center of a 4-mile area of response. The company serves as a second alarm unit for the paid department in any area outside the district and has attended some of the biggest fires that Baltimore County has experienced since 1919.

The company's area of protection contains 2 defense plants, 3 state sanitoriums, 4 private nursing homes, a prisoner of war camp, state police headquarters, the 110th Field Artillery Armory, 5 large schools, a dyeing and bleaching plant, a flour mill and a number of small business establishments, not to mention the residential sections.

ABOUT 1937, the company decided to make a floodlight wagon. Starting with a small, portable gasoline outfit that would carry one light, which was found very successful, the company decided to go a step further and purchase a truck for a more ambitious unit. The company obtained a 1936 Dodge panel truck, a farm lighting plant, a motor generator combination. They installed the generator inside the body of the truck. The truck and the lighting plant were both secondhand. Some of the members are good electricians and everybody contributed time and experience to make the first floodlighting unit. The unit worked very well and stood up under some hard use, but did not quite satisfy the demands of the firemen.

The company decided they wanted to buy a new Ford panel truck and make a new outfit. Some of the fittings from the old unit were used and the generator was mounted inside the body on the floor. With some new fittings the 1942 Ford truck became the floodlight wagon shown in the picture.

On this unit are four Crouse-Hinds 1,000-watt Spreadlites, two 1,000-watt spotlights, a Crouse-Hinds 500-watt floodlight, three 250-watt portable hand lights, three portable junction boxes, and four lengths of heavy duty wire, 250 feet to the length. Inside the body are two 100-watt bulbs and two fastened over the running board near the rear fender. These lights illuminate the unit so that no one will fall over the wires coming from the unit.

Four flat pieces of steel were welded to the top of the truck, one on either side of the front and one on either side of the rear. These plates were drilled, a bolt was placed in the hole and then welded in position. Any of the 1,000-watt or 500-watt lights can be installed on these plates while the unit is in operation. A base was made for all the large lights so that they can be set up for operation anywhere, either inside a building or outside as the needs might be.

Mounted inside the body is the Stanley, series-wound 5½-kilowatt, 120- to 125-volt generator, driven by 6 "V" belts from a power take-off direct from the motor. This generator is driven or put into gear by shoving the clutch and pushing forward the lever of the power take-off. This slides the gears into mesh. The motor is accelerated just as if the truck were starting into motion. When the clutch is let out, the generator turns over rather than the wheels. As the motor is accelerated, the speed of the generator increases and, in turn, steps up the voltage from the generator.

There is a Fink 10-circuit switchboard that has a volt and ammeter gauge at the top. Each of the circuits has two fuses on the board. Wires run from the generator to the switchboard bus bars and from the bus bars by means of a knife switch, double pole, to four Twist Lock receptacles installed just inside the rear doors. Also, inside is a reel, such as garden hose

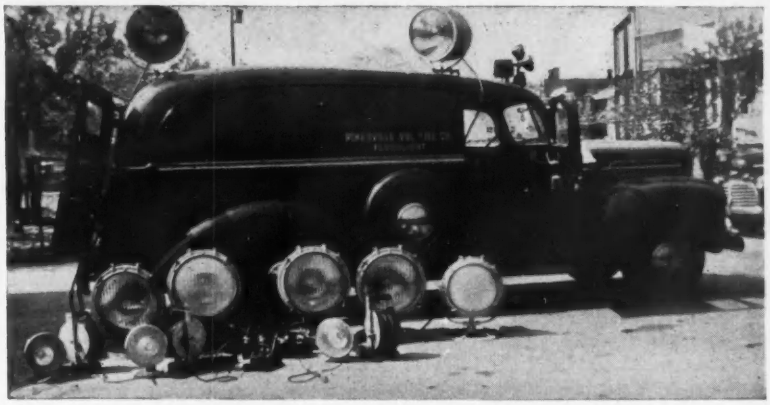
Above is the Pikesville Company's Cadillac ambulance, which can be supplemented by the floodlight wagon in an emergency situation.

is wound on, mounted on the side of the truck body near the roof on which to roll the wire.

When we arrive at the scene of the fire, we loosen our lights, place them about where they may be needed, and then pull off one section of the extension wire. At the end of the leader wire, a junction box is installed which has four Twist Lock receptacles mounted on the top with a light inside a shielded cage. The light is on this junction box so that anyone going that way cannot miss it and fall over it.

All the large lights have 10 feet of wire fastened on them and a plug at the end of the wire. The plug is a Twist Lock, a patented plug that is inserted into a receptacle and then given a quarter turn to lock in place. After the large lights are plugged in, the switch is thrown on the panel board and the current feeds the lights. Each outlet in the rear of the body is painted a different color and the switches on the panel board match the outlets.

We have a set of three red clearance lights mounted on the back of the truck, just under the light bracket on the top of the body. On the end of this bracket is a bulb that draws current from the generator; the three red lights are on the battery of the truck. This is so that there is light at all times, regardless of whether or not the generator is running.



The floodlight wagon built by the Pikesville Volunteer Fire and Ambulance Service Company. On top of the truck are two 1,000-watt spotlights, on the ground are four 1,000-watt spreadlites, one 500-watt floodlight, and three 250-watt portable hand lights equipped with reels of wire and junction boxes. The truck used was a 1942 Ford panel truck.

This unit can and has carried five of the largest lights, 1,000-watt, and it can supply current for the lights without heating up too much. Several times this unit has been used all night, either at fires or at bad wrecks, and the motor has remained comparatively cool. The unit is very economical on gasoline.

Among the equipment on the truck are a carbon dioxide 15-pound extinguisher, a first aid kit, a pair of hip and a pair of knee boots, a fire fighting coat, and a pick axe. On the top of the body, the unit has a 3-light roto-ray revolving light for right-of-way purposes. There is also a siren and a bell to be sounded when going to or coming from fires.

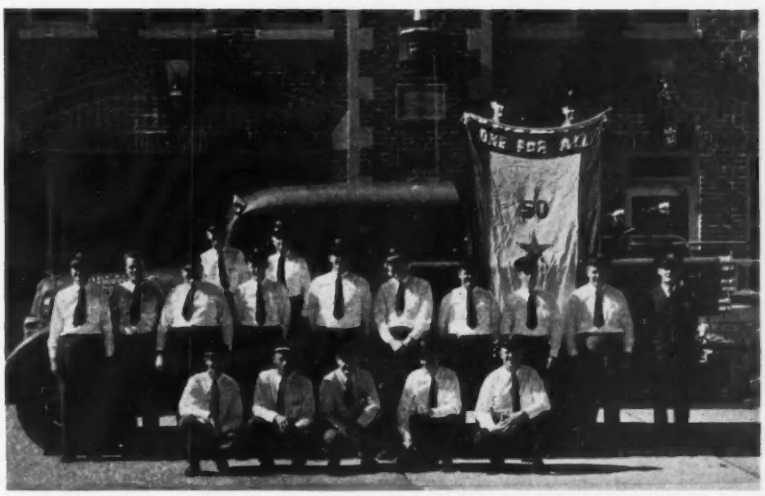
The portable hand lights have 200 feet of wire mounted on a reel that is fastened on a piece of angle iron. One end of the wire on these reels is fastened to a receptacle on the side of the reel. The current is furnished from the junction box to the receptacle by means of a short jack with plugs in each end, one to go into the junction box and the other end to fasten on the light reel.

The unit has been used in conjunction with the Baltimore City Fire Department and was praised very highly. The idea for the unit is to have as good a piece of equipment as possible and keep the weight down as low as possible. The lights can be moved whenever, and wherever, we want them, without having to move the unit once it is set in operation.

The company also owns a Cadilac ambulance, a 1941 Seagraves 750-gallon pumper, and a 1938 Diamond-T with 500 g.p.m. skid pump mounted across chassis and an old 600 g.p.m. pumper.

The flood light wagon can, on occasion, double as an emergency ambulance by removing the lights and installing 4 cots hanging from the side walls. The unit has seen much service in both capacities.

The Pikesville Volunteer Fire and Ambulance Service Company pictured in front of the engine house with their service flag.



After the fire had gone through the roof.

JOLIET, ILLINOIS, MERCANTILE

ON the day before Easter, fire broke out in a clothing store, Joliet, Illinois, in a rack of men's windbreaker jackets. The cause of the fire has not been determined, although a theory has been advanced that the windbreakers may have been treated with a wartime waterproofing compound which caused spontaneous ignition.

The fire department responded with two 1,000 and one 750 g.p.m. pumpers and hose trucks, one aerial truck and a service truck. Aid from the Fire Department of the East Joliet District was summoned.

Combustible insulating material forming a suspended ceiling for the first floor caused heavy smoke damage. It also was a contributing factor in the rapid spread of the fire throughout the building. Losses may total $292,000.

LOW WATER PRESSURE HAMPERS PHILADELPHIA FIREMEN

Acme

BACKFIRE from an oxy-acetylene cutting torch in use at the Pennsylvania Range & Boiler Co., Philadelphia, on April 13, caused a fire resulting in damages totaling $270,000.

By the time the firemen arrived, the fire had involved a major portion of the roof area. The first company connected their pumper to a hydrant 500 feet distant, and the first hose stream was put into service approximately 15 minutes after the arrival of the firemen. The stream, as well as subsequent streams from pumpers near the plant, was extremely weak and witnesses said that 45 minutes passed before effective hose streams were used because of the inadequacy of the water supply. Eventually, by manipulating equalizing valves on the city mains and reducing water consumption in the neighborhood, the water supply was increased. With the replacement of the usual nozzle tips with smaller tips ($1\frac{1}{4}$-inch with 1-inch tips) streams with effective reach were eventually obtained.

HOTEL FIRE, SALINAS, CALIFORNIA

Acme

Damages estimated at $150,000 swept the Hotel Franciscan on May 28. In addition to the 110-room hotel, several nearby exposures were destroyed. Chief George Von Soosten reported that 8 firemen were injured.

SYRACUSE FOUNDRY INFERNO

FIRE, starting in the packing and shipping room of E. C. Stearns & Co., Syracuse, New York, on the morning of April 6, roared throughout the metal working plant, leaving behind total destruction and a loss estimated at $750,000.

Nearly all sprinkler equipment either was shut off or inadequately supplied through partly closed valves. Three post-indicator valves were open giving an impression that water was available for sprinklers but three non-indicating valves were either totally or partly closed. In addition, a 30-pound piece of lead was found in a tee in the sprinkler riser supplying sprinklers on the upper floor of the building in which the fire started. Housekeeping and maintenance of fire protection had previously been unsatisfactory at this plant. No one in charge of the plant appeared to know why the sprinkler system was not in working order.

The fire was discovered belatedly by the watchman at 5:30 A.M. By that time the fire had gained considerable headway and second and general alarms were quickly sounded.

The public fire department, aided by four suburban fire companies confined the damage to the plant and to six nearby dwellings. All told, 15 engine companies, 5 ladder companies, a water tower and turret wagon using 25 hose streams finally extinguished the conflagration.

CLIFTON, NEW JERSEY, FACTORY

This plant was making flashlights and batteries for the armed forces prior to the fire of May 13. Indications are that the sprinkler supply tank was only partly full and sprinklers were obstructed by high piling of stock. Four departments fought the fire. Loss $400,000.

Let's Get Acquainted

THAT the average fire department plays a major role in civic activities is well illustrated by the Let's Get Acquainted report this month. These examples of community service rendered by the fire companies were selected from the report sheets received from members of the Volunteer Firemen's Section. The activities outlined below in no way represent a complete inventory of the innumerable useful projects carried on by the fire companies. However, they serve to indicate the type of extracurricular activity that helps to keep a department a going concern.

A fire company which has no hobby or outside interest can get somewhat rusty between calls, especially in a small town which has few alarms during the year. The more the company cooperates in community affairs the more they will be respected by the home town residents and their neighbors.

At a later date the Editor plans to include a list of other company projects conducted primarily to raise money for fire department equipment.

EXTRACURRICULAR ACTIVITIES

CALIFORNIA

LAGUNA BEACH Annual dances, Christmas party for members and families, annual stag dinner.

COLORADO

COLLEGE VIEW Annual dance, picnics, banquets.

CONNECTICUT

EAST WOODSTOCK The Muddy Brook Fire Department acts as a social club.

MIDDLETOWN The Russell Fire Company holds periodical inspections of all fire hazards, including the largest industrial risk in city, public schools, private dwellings for oil installations.

DELAWARE

TALLEYVILLE Cooperate in civic affairs, fire house used for local affairs and used in Civilian Defense as a control center.

FLORIDA

SEBRING Department at present building a playground for school age children.

IDAHO

JEROME Annual ball on Thanksgiving night.

RIGBY Takes care of Christmas programs.

ILLINOIS

DOLTON Sponsors Boy Scout Troop and Cub Pack. Are planning a gigantic celebration for their 50th Anniversary as an organized fire department.

FOX LAKE Monthly social.

GRAND RIDGE Sponsor homecoming and dances.

GRAYSLAKE For 43 years have conducted annual dances on St. Patrick's Day.

MIDLOTHIAN Fire department built two pieces of equipment, a 250 g.p.m. pumper and a squad panel truck. The company also owns its own club house.

TROY Department has conducted one carnival a year for the last 14 years. They have $11,000 invested in equipment.

URBANA The University of Illinois trains auxiliary firemen, rescue squads and first aid classes. Serve at public functions and night, Sunday, and holiday service for the entire University emergency service.

WESTERN SPRINGS Furnish fire guards at all public gatherings, assist and judge Boy Scouts in first aid and fire fighting.

INDIANA

DILLSBORO Have had annual homecoming on Labor Day except in 1944, carnival activities, contests, dances, band concerts, parade and free entertainment by radio stars. Department runs softball league in summer and owns a playground at edge of town.

GAS CITY Assists at basketball games and other games where needed in full uniform.

LAWRENCE Members and families invited to quarterly banquet which includes members of surrounding companies, educational pictures are shown and lectures given.

IOWA

ALTA Sponsors outdoor ice skating rink.

BREDA Dances, dinners, and outings.

WEBSTER CITY Annual Firemen's Ball for recreation fund.

KANSAS

CHANUTE Fire department sponsors Boy Scouts, American War Dads, and have place where servicemen can catch rides to different cities.

ELLIS Fire drills are held monthly in public schools, and buildings and schools are checked semi-annually for fire equipment.

LOUISIANA

LAFAYETTE The Hobo Volunteer Fire Company has a chicken barbecue once a year for inactive members and a feed once a month for the active members.

THIBODAUX Each company has social functions three or four times yearly. Prior to war, the department held annual Firemen's Parade.

MAINE

CAMDEN Sponsors Boy Scout Troop and other activities.

CUMBERLAND Have constructed several water holes for pump suction, removed fire hazards by burning grass in spring and fall, and have purchased resuscitator and first aid equipment.

NORTHEAST HARBOR Operates ambulance free to residents of town.

RICHMOND Operate Firemen's Relief Association, Inc., for purpose of relief to sick and injured members.

SANFORD Community ball and socials.

MARYLAND

CUMBERLAND Socials and other activities are held by the Bowmans Addition Volunteer Fire Company.

SNOW HILL Country store and square dance held up until two years ago when stopped due to war conditions.

MASSACHUSETTS

BARNSTABLE Firemen comprise group in village and have raised several thousand dollars by food sales, public suppers, scrap drives, etc. Money used to support local philanthropies and maintain a Firemen's Relief Fund.

SOMERSET Special activities include bowling league and events such as annual Ladies Night. Formerly ran horse show.

MICHIGAN

CLIO Sponsors Girl Scouts and act as special police in city in case of emergency.

Hebron, Nebraska. Shown at the left are two pieces of apparatus belonging to the Hebron Volunteer Fire Department. On the left is a 1935 Ford V-8, carrying 1,400 feet of 2½-inch hose. The other piece of equipment is a 1942 Chevrolet with a Waterous rotary 500 g.p.m. pump and supplying 1,000 feet of 2½-inch and 400 feet of 1½-inch hose.

The department consists of three companies, one for each truck and a first aid company of 10 men equipped with an E & J resuscitator.

Chief E. F. Wulfekoetter reported that the department covers an area of 400 square miles with 6,000 people. The volunteers meet monthly for training periods, and they receive no compensation for their time, either while fire fighting or drilling.

KALAMAZOO Eastwood Fire Department holds dances and ice cream socials.
OTSEGO Turkey raffle at Thanksgiving time.
OXFORD Annual Firemen's Dance.
WATERFORD TOWNSHIP Yearly banquet for firemen and wives.

MINNESOTA

ANOKA Sponsors an Honor Roll Board for men and women in the service.
FLOODWOOD Annual dance.
KEEWATIN Firemen are typed for blood donors for emergency calls.
MADELIA Annual dance.
MOORHEAD Dances.

MISSOURI

HERMANN Pump cisterns and basements during floods.
SULLIVAN Community Christmas programs. Fire training of Boy Scouts, weekly meetings open to public with visitors welcome.

MONTANA

HAMILTON Annual banquet for wives and sweethearts, and have been having annual Homecoming Night for all old members, which was discontinued for duration.

NEW HAMPSHIRE

HANOVER Sponsors children's Christmas parties, gives rides on truck, and presents toys and candy.
LITTLETON Yearly ball.
MEREDITH Firemen's Ball on Thanksgiving Eve.
PETERBOROUGH Annual ball.

NEW JERSEY

BELLMAWR PARK Run the 4th of July celebration in village and sponsors local scout troop.
CHATHAM Annual ball.
ESSEX FELLS Stag parties for members for the duration of the war.
NAVESINK The Navesink Hook and Ladder Company are active in civic affairs.
WENONAH Public demonstrations in first aid work.
WEST PATERSON Field days. Chief carries out fire prevention training among schools.

NEW MEXICO

HOBBS First aid training given to Boy Scouts. Raised $500 for Bataan Relief Organization. Three members of fire department belong to City Council.

NEW YORK

ALLEGANY Dances.
CANAJOHARIE Active in all municipal affairs.
COBLESKILL All community activities.
EAST CHESTER Yearly departmental inspection. Equipment and emergency work displayed to Red Cross and auxiliaries.
GEORGETOWN Social events such as dances.
GREECE Card parties, etc., among members and community.
NORTHVILLE Fire Department members have organization known as the Northville Firemen's Association, Inc., who put on 4th of July celebration, also dances. Money is used to sponsor Boy Scouts and other organizations.
PORT CRANE Normally have had carnivals, Bingo games, and card parties, but not at present.
RICHMONDVILLE Labor Day celebration for firemen.
ROTTERDAM District No. 2 run a carnival for benefit of members.
ST. JAMES Holds annual Installation Dinner, occasional collations, and in normal years annual ball and entertainment as well as dances.
SILVER CREEK Carnivals. Expect to be host to Southwestern Association of Firemen convention.
WATERVILLE Carnivals, field day, and dances.

NORTH CAROLINA

MOORESVILLE Sponsors rides, shows, etc.

NORTH DAKOTA

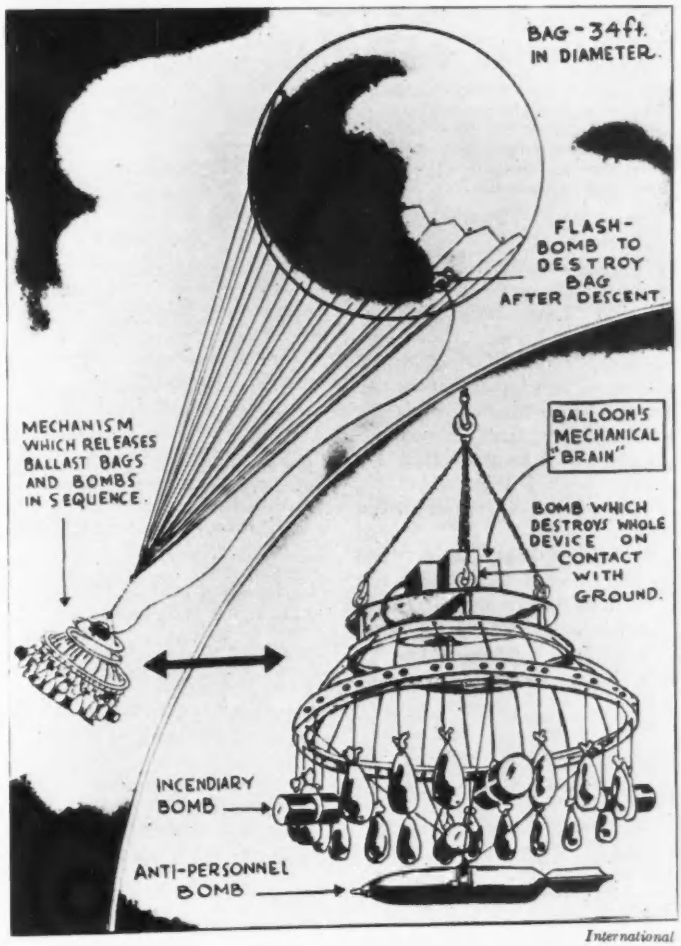
PORTAL Have smokers and social meetings from time to time.

OHIO

ADAMS TOWNSHIP Member of the North-Western Firemen's Association. Has won first or second marching prize since 1936 and also have fancy drill team.
CANFIELD Raffles and shows.

(Continued on Page 27)

U. S. Forest Service Official Describes Jap Balloon Attack


BAG - 34ft. IN DIAMETER.
FLASH-BOMB TO DESTROY BAG AFTER DESCENT.
MECHANISM WHICH RELEASES BALLAST BAGS AND BOMBS IN SEQUENCE.
BALLOON'S MECHANICAL "BRAIN"
BOMB WHICH DESTROYS WHOLE DEVICE ON CONTACT WITH GROUND.
INCENDIARY BOMB
ANTI-PERSONNEL BOMB

International

A newspaper artist's conception of the balloons which the Japs have been launching from their home islands against continental United States. This drawing, prepared from descriptions released to the public, shows how a mechanism stabilizes the altitude and drops incendiary and anti-personnel bombs when the balloons reach the end of a timed flight.

IN a recent radio broadcast, Lyle F. Watts, Chief of the Forest Service of the United States Department of Agriculture, gave the following information on the Jap balloon attack on the United States.

"Control measures adopted by the Army and the Forest Service under Army direction are effectively combating this attack. . . . The first Japanese balloon was found in the fall of last year, and they then came over in increasing numbers.

"The bag consists of five layers of silk paper. It is 35 feet in diameter. It's inflated with hydrogen gas and is capable of carrying several hundred pounds. Under the bag is a large metal ring on which a control box is mounted. Under this ring is another metal ring on which are hung the sandbags of ballast and incendiary bombs.

"From 25,000 to 35,000 feet above the Pacific Ocean there is a layer of air which travels constantly from west to east — that is, from Japan to the United States. The Japs send these balloons up to the top of this strata of moving air — that is up to 35,000 feet, then as the balloon starts moving east it begins to lose altitude, as all balloons do. When it descends to 25,000 feet, a barometric pressure switch automatically drops a sandbag. Still traveling east, the balloon goes up again to 35,000 feet. This process of up and down is repeated until the balloon reaches the American coast. And if the Japs have figured right, the last sandbag has then been dropped.

"A second automatic switch then takes over. In place of the sandbags, this one controls incendiary bombs. When the balloon drops 2,700 feet an incendiary bomb is released. The balloon goes back up, then down again and another incendiary bomb is released and so on as it

(Continued on Page 24)

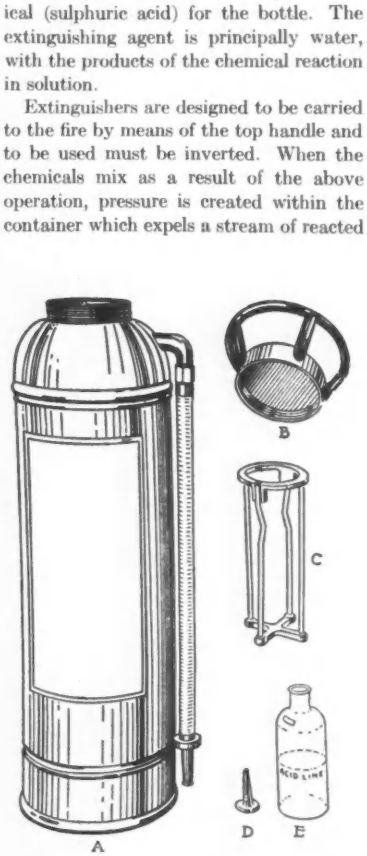
First Aid Fire Appliances

I. Soda Acid Extinguishers

This article, the first of a series on the use of first aid fire appliances, was taken from National Fire Protection Association's Recommended Standards for the Installation, Maintenance and Use of First Aid Fire Appliances.

APPROVED chemical solution (soda-acid) hand fire extinguishers are made in two principal sizes: one having liquid capacity of 1¼ to 1½ gallons, the other 2½ gallons to filling mark. Chemicals used are a powdered chemical (bicarbonate of soda), designed to be dissolved in water in the extinguishers shell, and a liquid chemical (sulphuric acid) for the bottle. The extinguishing agent is principally water, with the products of the chemical reaction in solution.

Extinguishers are designed to be carried to the fire by means of the top handle and to be used must be inverted. When the chemicals mix as a result of the above operation, pressure is created within the container which expels a stream of reacted chemical solution through the hose. While the stream is usually most effective if used close to the fire, in case of necessity, it can be directed effectively from a distance of 30 to 40 feet horizontally.



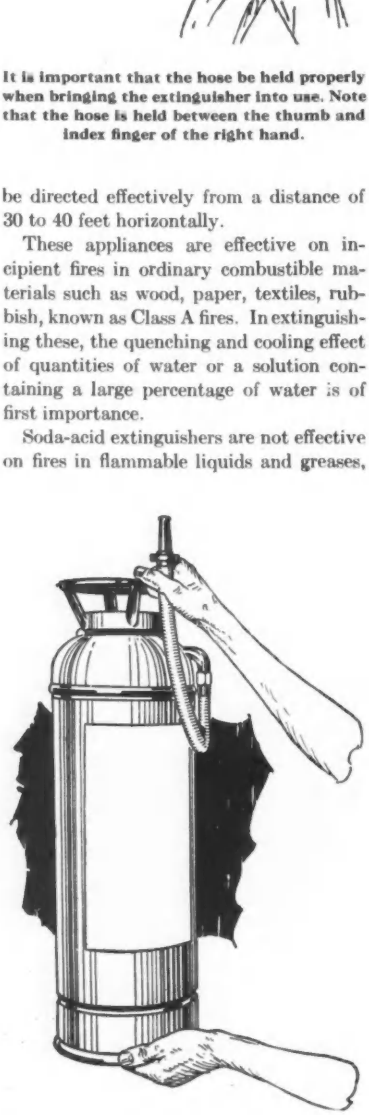
The various parts of the conventional style of loose-stopple type soda-acid extinguisher are shown above.

(A) Tank or shell; (B) Ring top or cap with gasket in place; (C) Acid bottle cage; (D) Acid bottle loose-fitting stopple; (E) Acid bottle showing acid line at the 4 ounce level.

It is important that the hose be held properly when bringing the extinguisher into use. Note that the hose is held between the thumb and index finger of the right hand.

These appliances are effective on incipient fires in ordinary combustible materials such as wood, paper, textiles, rubbish, known as Class A fires. In extinguishing these, the quenching and cooling effect of quantities of water or a solution containing a large percentage of water is of first importance.

Soda-acid extinguishers are not effective on fires in flammable liquids and greases, in vats or open vessels, where the blanketing effect is essential. They are of value on incipient fires on floors soaked with oils and greases, where the quenching and cooling effect of the water solution may be utilized.



The fingers of the right hand grasp the ring top and the left hand grasps the bottom. You are then ready to lift the extinguisher off the hanger hook and carry it to the fire.

The extinguisher can then be easily inverted by grasping bottom handle with left hand. When in approximately the position shown, the fingers of right hand should release the ring top, continuing to hold the hose. The extinguisher then is in an upside-down position, held by the bottom handle with the left hand and is in full operation.

Their use in connection with fires in electrical equipment such as panel boards, switch boards, motors, and the like is not recommended, chiefly because the soda-acid solution is a good conductor of electricity. In some cases fires in electrical equipment may be such that the quenching and cooling effect of water or water solutions is necessary. In such cases equipment should be made electrically dead before applying water or water solutions.

The force, length and duration of the extinguisher stream are not dependent upon the operator. The 2½-gallon extinguisher discharges an effective stream of liquid for approximately one minute; the 1¼-1½-gallon device, a little over ½ minute. These appliances are readily operated while being carried about.

When located outdoors or in unheated sections of buildings, extinguishers of this type must be protected against freezing by suitable, heated cabinets.

One 2½-gallon or two 1¼- 1½-gallon extinguishers are considered a unit for Class A fires (ordinary combustibles).

As a guide in determining the number of units which should be installed under various conditions, the following recommendations are made:

Class I. Light hazard occupancies. This class may include occupancies such as offices, schools (exclusive of trade schools and shops), public buildings, etc. Because of relatively small amounts of combustibles, incipient fires of minimum severity may be anticipated.—Units shall be so located that a person will not have to travel more than 100 feet from any point to reach the nearest extinguisher but at least one unit shall be required for each 5,000 square feet of floor area.

Class II. Ordinary combustible occupancies. This class may include occupancies such as department and dry goods stores, warehouses and miscellaneous manufacturing of average hazard. Incipient fires of average severity may be anticipated. Units shall be so located that a person will not have to travel more than 50 feet from any point to reach the nearest extinguisher but at least one unit shall be required for each 2,500 square feet of floor area.

Class III. Extra hazardous occupancies. This class may include occupancies such as woodworkers, paint spraying and dipping operations. Because of character or quantity of combustibles, extra severe fires may be anticipated. Units shall be so located that a person will not have to travel more than 50 feet from any point to reach the nearest extinguisher, plus additional units as directed by the inspection department having jurisdiction, but at least one unit shall be required for each 2,500 square feet of floor area.

Extinguishers shall be conspicuously located where they will always be readily accessible and so distributed as to be immediately available in event of fire. They shall be hung on hangers or set on brackets or shelves so that the top of the extinguisher is not more than 5 feet above the floor.

Extinguishers shall be kept full (to filling mark) at all times, and recharged annually as well as immediately after use In recharging these extinguishers, all parts shall be washed thoroughly with water and the water drained through the hose.

Extinguishers shall be examined at regular intervals at least several times a year. Make sure that they have not been tampered with nor removed from their designated places; detect any injuries; see that they are not empty; and see that the orifice of the hose nozzle is not clogged.

At least once yearly, before emptying and recharging, the extinguishers and all their parts (including gasket and hose) shall be examined for deterioration or injuries due to misuse. Parts which are not in good condition shall be replaced. It is important that acid bottles and their corresponding stopples, when replaced, should be exact duplicates of those originally provided with the extinguishers. Otherwise the discharge may be impaired or the extinguisher rendered inoperative. At these annual inspections, extinguishers of this type shall be emptied and recharged.

Recharging work should be done under capable supervision and date of recharging and signature of the person who performed it put on the tag attached to each extinguisher. At each annual inspection, it is a good practice to have one or more of the extinguishers discharged before an assembly of the occupants of the building. These exhibitions are valuable to familiarize the occupants with the use of extinguishers.

The powdered chemical shall be thoroughly dissolved in water outside the extinguisher in exact accordance with instructions on the extinguisher or charging unit. The water should preferably be lukewarm, but never hot.

Anti-freeze ingredients, such as common salt and calcium chloride must not be used in soda-acid extinguishers, as they will reduce the effectiveness of the chemical reaction and discharge and may corrode extinguishers so as to make them dangerous for use.

Direct stream at base of flames. Follow flames with the stream.

6 of 70 MASTERLIGHTS

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The best in colored oscillating lights for your motor equipment.

Type 06 ← Clears Both Sides of Street

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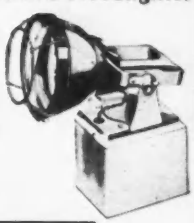

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Types F5 and Super-6 → Dry and Rechargeable Units. ¾ Mile Range

Type T ← Roof mounted Officers Searchlight 360°

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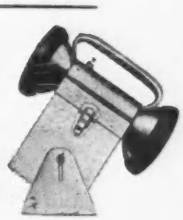


CARPENTER MFG. CO.

MASTER★LIGHT★BUILDING

BOSTON 45, MASS.

Suggestions for a Pumper Drill

By Chief W. Lewis Armstrong
Old Forge, New York

This article appeared, in part, in *"Army's" Fire Service*, April 1945, a quarterly service bulletin, edited by Chief Armstrong.

LOADS of departments hold drills that go something like this: When the gang gets there, they pile all over the apparatus about six or seven on the tail, a couple in the hose body, three on each side, then four or five to bother the driver and they start for the nearest water.

After they get set up, a couple of men take the nozzle and the operator starts to pump. The fellows watch him and after two or three have run the pump, almost anyone can step up and get water. While you are changing operators, the men on the nozzle relax, one lights a cigarette, and the other looks over some blonde. About that time the water comes through pretty fast and you can be in trouble.

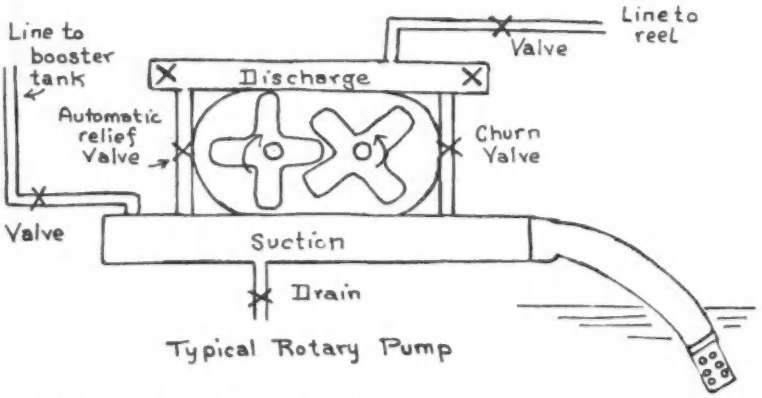
A man who learns to run the pump this way is not prepared to get water if something goes wrong, like a valve being left open. He doesn't know why this valve was opened or closed, or what it is all about if water doesn't come right away.

Whenever you are training pump operators, I suggest that you tie the nozzle securely so you may operate the shut-off. It's safer.

A fire department I know of went to a fire with one of the best trucks that is made. They dropped the 6-inch suction and tried for an hour to get water, but without success. The chief, who was not at the fire, told me later that the reason was that they forgot to close the valve between the booster tank and the pump. In another case, a man was operating a pump at a fire school and did everything he should to get water with a little front-mounted pump except put the pump in gear. A paid driver asked me how to draft water with his pump. He had driven it for seven years and he wouldn't know what to do if he had to leave the city limits and pump from draft. The chief would not let the men go out and practice for fear someone would say they were playing with the fire apparatus.

Here is my advice, if you have to train men to run the fire trucks, get all the plans and diagrams for the pump and sit down with someone who knows pumps. Learn where the water goes from the time it comes into the pump until it leaves the discharge gate, what each valve is for and where they are located. Learn the gauges and how they work, why one is a compound gauge and the other a straight gauge. Follow the lines to the pump from the tank and to the booster hose reel.

Priming is where we have trouble. Today there are three types of pumps: piston, rotary, and centrifugal. All three have to be primed; there is no water in them when we start, and the centrifugal takes extra effort.



Typical Rotary Pump

With the piston and rotary pumps, when your hose is connected, open the discharge gate to that hose line and see that all other valves are closed. As the pump is put in gear, it turns over, displaces the air on the suction side and creates a partial vacuum. The hand on the compound gauge should move down on the vacuum side and then as this vacuum is increased, the atmospheric pressure on the surface of the water forces the water up in the suction and to the pump. And your pump is primed. This is a simple operation and that is why it is so easy to get water with this type of pump.

As new trucks come out, they are nearly all equipped with centrifugal pumps. There are so many types it is impossible to go into each in this article. On all pumps, teach your men to watch the compound gauge when starting to pump. It tells the answer. If the needle does not move down on the compound side, stop and look for the trouble. There is a reason if it doesn't.

Never race a pump or motor when you don't get water. That's when a good operator knows what to do. The pressure must be reduced on the inside of the suction hose so that the pressure on the outside will force the water up to the pump.

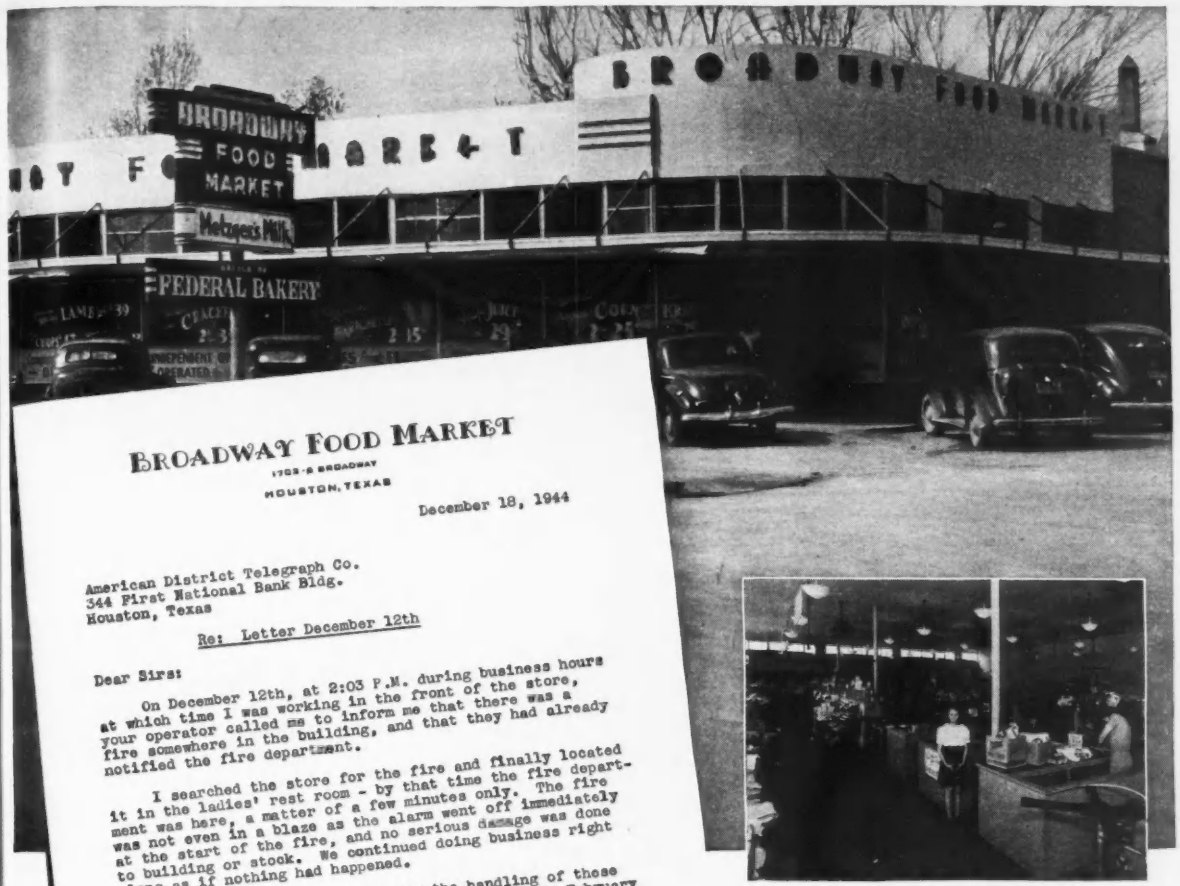
Before going into hydrant work, it would be well to teach the men how to open and close one. Just because the water runs out does not mean that the hydrant is fully open. Also watch out for jamming threads.

That compound gauge is also important when we are working from a hydrant. Sometimes we get on a small main with a big pump and try to take more water than the line will give. This happens mostly when we have a big fire and outside help is called. More pumpers get on the main than should be there. When you call another chief to come in, tell him a man will meet him at the outskirts of town. He will be instructed where to go with his pumper.

When the compound gauge gets down to 10 pounds pressure, have the operator let you know; that is all the water he can give you safely from that hydrant. Maybe 5 pounds in very extreme cases but it must be watched carefully, as there have been cases where the operator pulled too much "vacuum" and some hot water boilers along the streets collapsed. Then again, the pipes or packing may break down on an old line.

In taking the pumper out to train men, this has been tried and seemed to work out. Have only a small crew ride with the pump and let the rest go in their own cars. When you get all set up, the lines tied down and you have pumped once with everything working all right, try to arrange the pump connections so the operator cannot get water until he fixes something. Send the man up the road out of sight and out of hearing and doctor up the pump. When he comes back and starts up his pump, the compound gauge should give the answer.

(Continued on page 22)



BROADWAY FOOD MARKET
1702-6 BROADWAY
HOUSTON, TEXAS

December 18, 1944

American District Telegraph Co.
344 First National Bank Bldg.
Houston, Texas

Re: Letter December 12th

Dear Sirs:

On December 12th, at 2:03 P.M. during business hours at which time I was working in the front of the store, your operator called me to inform me that there was a fire somewhere in the building, and that they had already notified the fire department.

I searched the store for the fire and finally located it in the ladies' rest room - by that time the fire department was here, a matter of a few minutes only. The fire was not even in a blaze as the alarm went off immediately at the start of the fire, and no serious damage was done to building or stock. We continued doing business right along as if nothing had happened.

I have the warmest praise for the handling of these fire alarms, since we just went through a fire in February of this year, at which time we were closed up and did not know of the existing fire until six hours later. Had we had the Aero fire alarm this would not have occured.

Again let me say it is wonderful and gives one a feeling of security and rest. Thanks a lot.

Very truly yours,

BROADWAY FOOD MARKET

BY

MK:EMC

Exterior and interior views of Houston's modern Broadway Food Market—protected by the A.D.T. Aero Automatic Fire Alarm.

EVERY *Minute* COUNTS ...WHEN FIRE STRIKES!

The letter reproduced above provides convincing evidence of the speed of the AERO AUTOMATIC FIRE ALARM in detecting fire and summoning fire-fighting assistance when it is most needed...in this instance *before the fire was discovered by those on the premises.*

Write for descriptive booklets which explain in detail how this remarkable system eliminates the hazard of belated discovery and delayed alarms.

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Controlled Companies of **AMERICAN DISTRICT TELEGRAPH CO.** *155 Sixth Avenue, New York*

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A·D·T

Electric Protection Services

AGAINST FIRE · BURGLARY · HOLDUP

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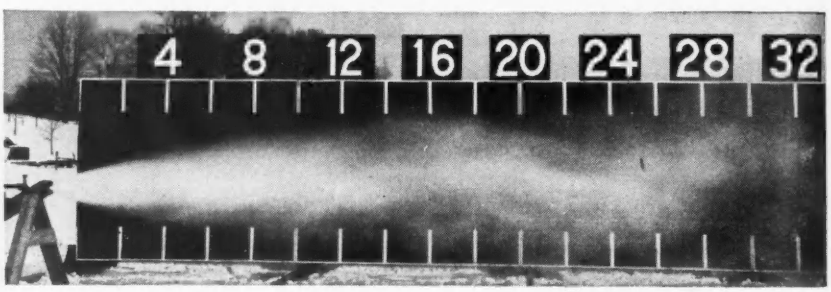
THE REAL STORY OF FMC

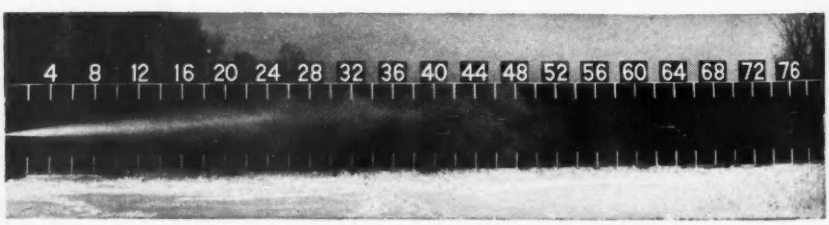
Don't confuse the results obtainable from FMC High-Pressure Fog Fire Fighting with any other system. There's nothing else like it for speed, for efficiency, for all-type fire protection.

These unretouched photographs show various applications of high-pressure fog as it is actually discharged from a standard FMC Fog Fire Gun. Several of the many settings are shown proving the true carrying power and dense steam-like fog that is usable for the speedy, efficient quenching of various types of fires. The standard capacity of one gun (two guns per unit) is 30 gallons per minute at 600 lbs. gun pressure.

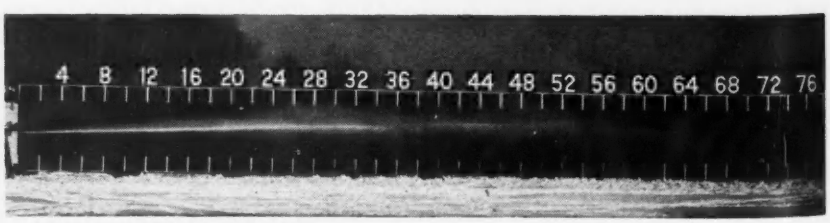
All of our claims for the effectiveness of high pressure refer only to the FMC System



WIDE FOG CLOUD. Not a hollow cone spray, but a fine dense fog with a harmless amount of entrained air at the blaze. Has an effective range of 20 to 24 feet. Imagine fighting a fire with this closely-packed fog! The fire couldn't help but cool down and smother out, and without water damage.



MIDDLE SETTING. Combination of distance, wide fog and density. Not a hollow cone! Has long range effectiveness of 30 to 40 feet. No harmful entrained air at the blaze. Very effective—reaches fire without endangering firemen. One man can handle easily. Water can be placed where it is needed most. Puts fires out without usual water damage.



LONG RANGE STREAM. Necessary only for great distance. Has reach of 50 to 60 feet. Has tremendous carrying power, penetration and effectiveness. Still is fire-fighting fog—making every gallon do maximum work. Used to reach "hard-to-get-at" fires. Uses much less water. No harmful entrained air at the blaze. One man handles gun and hose in moving around at fire.

BUILDERS OF BEAN HIGH-PRESSUR

HIGH-PRESSURE FOG FIRE FIGHTING

The FMC High-Pressure Fog Fire Fighting System—originated by the John Bean Mfg. Co.—has revolutionized fire fighting technique.

In fighting fire with fog—it's the pressure that counts! And—only the FMC High-Pressure Fog Fire Fighter packs the needed punch to produce and maintain *800 lbs. pump pressure*—better than *600 lbs. nozzle pressure.*

The high pressure gives you a combination of high velocity and finely-atomized water—just what you need to *blast, cool* and *smother* flame. Every droplet of water is broken up into thousands of tiny particles that can be *"blasted"* into the source of the fire.

Investigate! Write—*today*—for complete information.

* * *

IT'S THE PRESSURE AND THE PUMP!

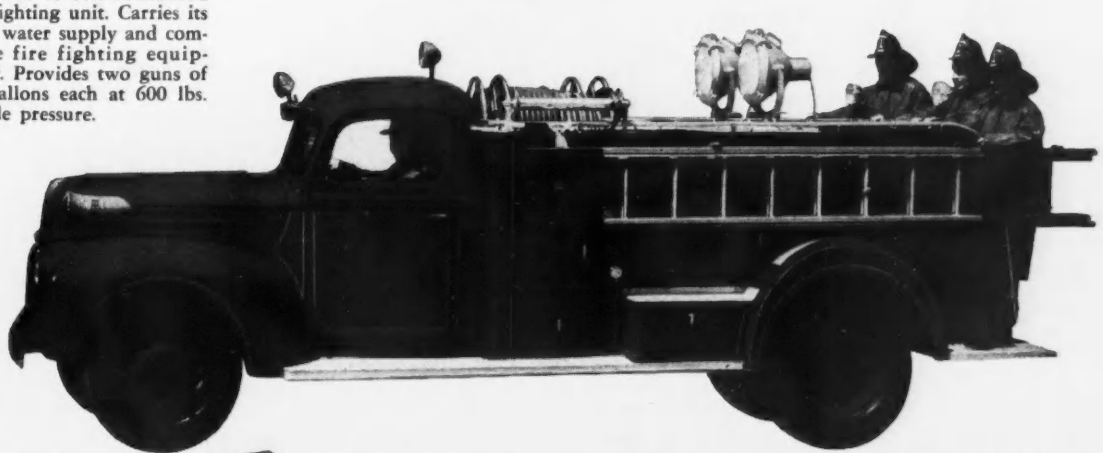
800 LBS. AT THE PUMP! That's a pretty tough job for any unit. But — the FMC High-Pressure Pump is built to deliver and maintain that pressure. The reason? This pump—built only by Bean — is different from all other pumps and is designed especially for high-pressure work by high-pressure pump engineers.

600 LBS. AT THE NOZZLE! The FMC Fog Fire Gun—built only by Bean—is designed especially for high-pressure work.

Note These Features:

1. **PROTECTIVE SPRAY.** Special spray protects face and shoulders from heat.
2. **ADJUSTING BARREL.** By turning barrel, flow can be changed from a straight "power" stream to a close-up fog for any type of fire.
3. **TRIGGER GRIP.** Gives natural position to arm and grip and is easy to hold.
4. **GUN LOCK.** Stream can be set in any pattern and locked there if desired. Relieves arm muscles.
5. **HOSE SWIVEL.** Eliminates bothersome twisting of hose.

STANDARD FMC FOG FIRE FIGHTER. A self-contained fire fighting unit. Carries its own water supply and complete fire fighting equipment. Provides two guns of 30 gallons each at 600 lbs. nozzle pressure.



FMC *Original* HIGH-PRESSURE FOG FIRE FIGHTER

CAN BE MOUNTED ON MOST STANDARD TRUCK CHASSIS

FOOD MACHINERY CORPORATION

JOHN BEAN MFG. CO. 726 HAZEL ST., LANSING 4, MICH. : BEAN-CUTLER DIVISION, 426 JULIAN ST., SAN JOSE, CALIF.

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"Half-Mile-Ray"

Portable Emergency Lights

STORAGE Battery and Dry Cell Outfits for all types of service. Also Spotlights for cab mounting on vehicles.

Send for Catalog "V"

THE PORTABLE LIGHT CO., INC.
216 William St., New York 7, N. Y.

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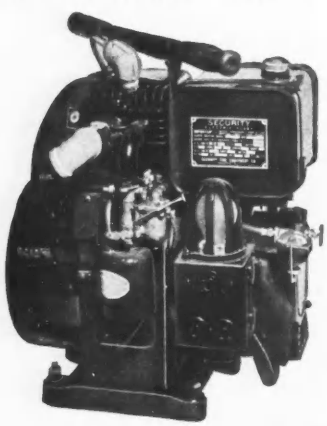
FLOODLIGHTING
GENERATING PLANT



This 1500 watt portable generator, with 25% reserve, especially designed for fire department service. Lightweight, rugged and compact. Air-cooled 4-cycle engine 2¾" bore x 2¾" stroke. Quick starting. Fully guaranteed, thoroughly dependable.

Also from 600 to 2500 Watts in A.C. and D.C.

Write for Catalog

SECURITY FIRE EQUIPMENT CO.
1550 Princeton Ave. Trenton, N. J.

MAKING A GOOD JOB OF IT

BY WARREN Y. KIMBALL

How Would You Fight This Fire?

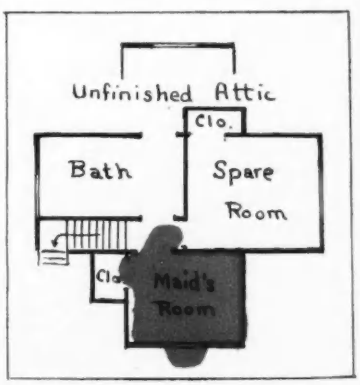
A NUMBER of readers of VOLUNTEER FIREMEN have asked us to include more typical fire fighting operations showing how routine fires have been handled. Accordingly this month we are describing a typical fire on the third floor or attic of a two and a half story frame residence. The building in question was a 10-room house having two furnished rooms and a bathroom on the third floor in addition to an unfurnished attic at the rear of the third floor. There were four dormers, one facing in each direction, and a wooden shingled roof which was several years old and in a fairly dry condition.

The fire occurred in mid-afternoon on a warm, dry day. The building involved was located in a suburban residential district. The fire department response consisted of two engine companies, one with a 750 g.p.m. pumper and the other with a 600 g.p.m. pumper, and a city service ladder truck. There were two hydrants within 300 feet.

The fire was discovered by neighbors when it burst through the front window of the maid's quarters on the third floor. The occupants, with the exception of the maid, were absent and neighbors lead the employee to safety as she attempted to rescue personal belongings. The alarm was given by telephone and from a public fire alarm box two blocks away. When fire apparatus reached the scene from stations approximately a mile and a half distant, flames were issuing from the third floor front window with great intensity and the fire was rapidly communicating to the wooden shingled roof over the front dormer. There was some danger of exposure to other wooden shingled roof dwellings located perhaps 30 feet apart on either side of the burning structure.

The first engine company to arrive laid a 2½-inch line along the street to the front of the building and extended the line up the stairway to the landing just below the third floor level before calling for water. From this point they were in position to prevent further extension of the fire from the front room into the hallway and other portions of the third floor, and at the same time they were below the level of the most severe heat. They had enough slack line to enable them to advance and complete the extinguishment once the main body of the fire had been knocked down. Quick work was necessary in checking the intensity of the fire, because in a very few minutes, the blaze would have spread to the concealed attic spaces surrounding the furnished rooms and would have involved the unfurnished attic. It is likely that such extension of fire would have destroyed the entire roof with considerable damage to the entire structure and the floors below seriously harmed by water.

While the first company was extending its line up the stairway to prevent further spread of the fire inside the structure, the second engine arrived and was given the task of preventing further spread of the fire on the outside. It is not ordinarily considered good practice to fight a dwelling fire with outside streams, which have relatively little effect on the seat of the flames. In this case it was imperative to check the outside fire quickly before it could spread over the surface of the wooden shingled roof. Thus considerable exposure hazards were reduced to other dwellings nearby. Accordingly, as soon as a hydrant connection could be made, a 2½-inch line was used from the ground for a few seconds to knock down the outside fire. By the time this was done, the city service ladder truck had arrived and a short ladder was raised



3rd Floor Plan
(extent of fire on arrival)

to the roof of the front porch and a second short ladder carried up and placed in the window of the room on fire. The outside line was then advanced up the ladders to this front window and used in helping to complete extinguishment of the main fire which was under control in a very short time.

The fire damage was almost entirely limited to the room involved on the arrival of the fire department and water damage to the floors below was at a minimum since hose streams were used only where flames were showing. No special ventilation

"The first company extended its line up the stairway to prevent further spread of fire inside the structure."

technique was needed, because the fire had vented itself so thoroughly through the front window and because it was controlled before entering the attic spaces. It was only necessary to remove roofing actually involved in the fire near the front dormer. Of course, several other windows were opened from the top and bottom to help remove smoke from the house, but this was not of major importance in this particular fire extinguishment operation.

Fires of this nature have been very common and frequently, when not discovered in time, largely destroy the roof and attic. It is not uncommon for occupants of a house to be unaware of the fact that the entire top floor is burning until notified by neighbors. The value of making the main attack on the fire by way of the stairway is made evident in this typical case. The importance of protecting exposures is also illustrated.

Had only one fire company equipped with a typical combination pumper been available a somewhat similar attack could have been made with two 1½-inch leader lines wyed off a single 2½-inch line, rather than using two 2½-inch lines. In such a case, one of the 1½-inch lines could have been taken up the stairway to handle the fire inside. The second 1½-inch line could have been used to knock down the outside fire and then brought inside if needed to back up the first line. In the event that the fire spread into the rear attic area, the second 1½-inch line could have been taken over a ladder at the rear of the building or to any other point requiring an additional stream. The 2½-inch supply line would remain available to back up the smaller stream and a second 2½-inch line could have been laid for this purpose. One and one-half-inch lines should prove entirely ample for inside work at dwelling fires. However, this fire had such a brisk start that the 2½-inch lines were entirely suitable, as they were used with care to avoid needless water damage.

Had salvage covers been available they could have been placed over the furnishings on the lower floors, but this was not done. In many cases an attic fire does not get sufficient ventilation and it then becomes imperative to open up enough to remove the heat and smoke to permit advancement of the hose lines within reach of the fire. It is futile to play into smoke when flame cannot be seen. Care must also be taken to overhaul carefully following a fire of this type to make sure that no fire has entered concealed spaces in the walls, ceiling, or partitions.

Enjoy THIS BETTER PROTECTION —from Chief to newest recruit!

M·S·A Streamlined FIREMAN'S HELMET

The sturdy, handsome M.S.A. Streamlined Fireman's Helmet serves Fire Departments throughout America with greater comfort, better head safety, finer design! Built of tough laminated bakelite, the Helmet is molded with a reinforcing ridge at the top of the curve of the shell, aiding deflection of impact, and increasing strength of construction. Arched brim is wide at sides for extra protection, yet permits carrying material on shoulders—extra length at rear guards neck from hot water, embers, and debris. Add to these advantages the parade-smart appearance, light weight and special comfort features of the M.S.A. Streamlined Fireman's Helmet, and you have the reasons why this great hat should be standard in *your* Department! Write for Bulletin DX-5.

MINE SAFETY APPLIANCES CO.
BRADDOCK, THOMAS and MEADE STS.
PITTSBURGH 8, PA.

CIRCUL-AIR
FIRE HOSE DRYER

- Is easier to use
- Saves drying time
- Reduces hose stretch
- Prevents mildew and rot
- Improves building design
- Air-conditions as it dries

THE CIRCUL-AIR CORPORATION
6339 East Palmer Avenue
DETROIT 11, MICHIGAN

DISCHARGED VETERAN FLAGS

Honor your discharged service men with this official War Dept. flag. Discharged veterans' emblem in gold on white field, with red border. Interchangeable numbers below show number of your men honorably discharged. Illustrated price list FREE. Many men already on their way home; get YOUR flag up NOW. Write today for prices.

Permanent
ROLL of HONOR

A permanent plaque, with individual names in silver on gold-bordered permanent name plates. Beautiful walnut plaque with eagle and victory torches. Write for price list today.

U. S., Allied Flags, and Service Flags in all sizes
Write for prices

REGALIA MFG. CO.
Dept. 82, Rock Island, Ill.

3 FIREMEN MAKE GOOD STOP 24 MILES FROM HOME

Hard fight won after long ride with rural truck

RACING a fire 24 miles away to save the north wing and half the main barn at a small agricultural college is no small accomplishment for any fire department. The Stillwater, Oklahoma, Fire Department did exactly this with just a captain and two firemen on the night of April 6.

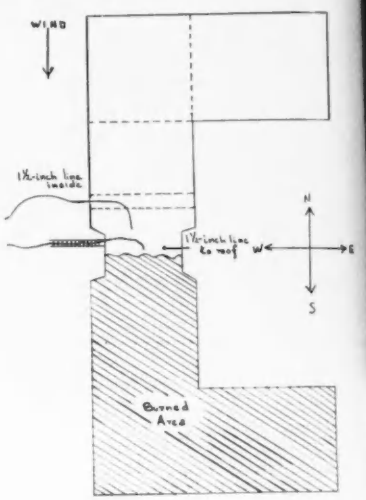
Langdon University is an agricultural and mechanical school for Negroes, located about 24 miles southwest of Stillwater. The university proper has a water system but it had not been extended to protect the university livestock buildings.

The barn involved by fire was the dairy, constructed of brick walls with wood joist and a tile roof. The main part of the building faced west and had north and south wings extending eastward.

The fire originated in the boiler room, located in the southeast corner. Upon the arrival of the rural fire truck, the fire had spread over the south wing and 50 per cent of the main portion of the building. There was a mild wind from the north which helped fire fighting operations.

The Stillwater water truck carried 750 gallons of water which supplied two lines of 1½-inch hose connected to a 350 g.p.m. pump. The captain ordered one of the 1½-inch lines to the roof of the main part of the building and the other line was operated on the ground floor, as shown in the diagram. Both lines had combination fog and straight stream nozzles. These two lines were converged and the fire was under control in about 30 minutes.

A large amount of grain and feed, stored in the north wing and main building, were undamaged, due to the efforts of Captain Charles Turner and his aides, Eddie Esparza and Glenn Pounder.



A New Way to Dry Salvage Covers

CHIEF CURTIS ALLEN, of the Sanford, Maine, Fire Department, tells of an easy way to dry salvage covers. In his fire station a number of large hooks were screwed into the ceiling between the apparatus. The salvage covers are suspended by the grommet holes so that there is no danger of tearing or injuring the corners.

Drying becomes a matter of minutes, as both sides can be exposed at once to a flow of warm air from a blower-type heater used to warm the apparatus floor. This method is much more convenient than laying the salvage covers on the ground or on a floor where they take up much space.

As ordinary salvage covers are 12 feet wide and 18 feet long, this method is practical only in stations with sufficiently high ceilings to suspend the covers at their full width.

"Information Please"

SECRETARY JAMES W. SIMPSON of the Relief Fire Department, Front Royal, Virginia, is interested in obtaining an up-to-date system for recording data as to date, time, location, owner, type of fire, and attendance of firemen responding to fire alarms. He would like to have such a record in a loose leaf form. Have any member fire departments developed a good record system which they would like to pass along to other readers of VOLUNTEER FIREMEN for possible use? Very excellent record systems have been developed for paid fire departments, but there seems to be a lack of a good fire record form designed specifically for volunteer and call departments.

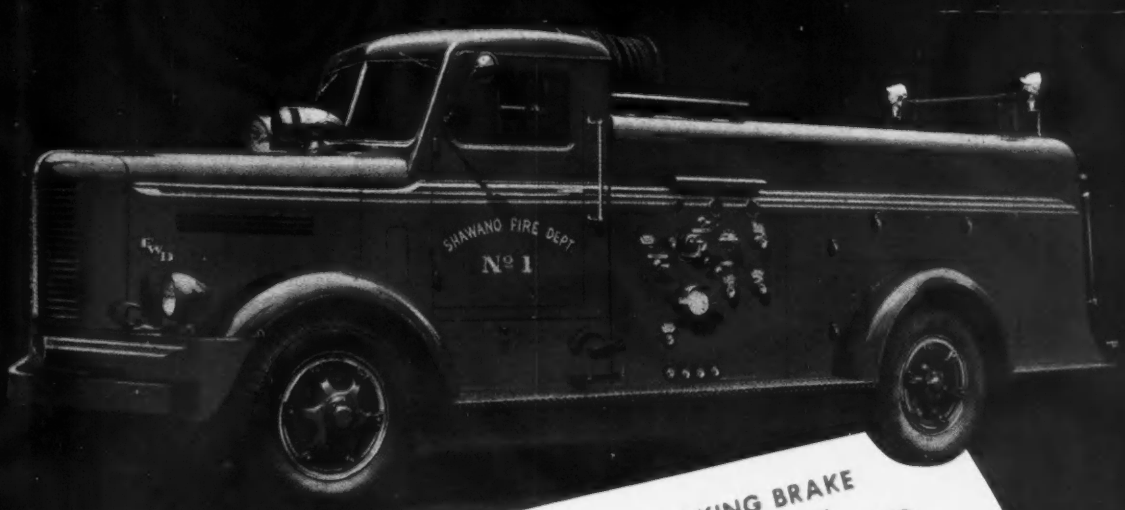
★ ★ ★

FIRE SCHOOL NOTES

Connecticut. Fire service leaders from all parts of the state were in attendance at the annual banquet given by the Connecticut State Fire Chief's Association at Wesleyan University, Middletown, on the occasion of the Fourth Annual State Fire College. Editor Warren Y. Kimball, as guest speaker, described "The Organization of the Small Town Fire Department."

Texas. The 16th Annual School for Firemen held at the Agricultural and Mechanical College, College Station, May 28 to June 1, had a total enrollment of 505, with 237 Texas cities represented. In addition there were in attendance some 65 representatives from Army, Navy, and Air Force establishments.

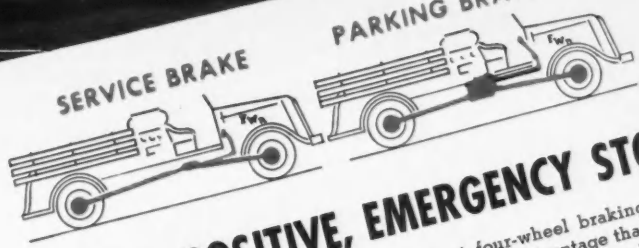
West Virginia. The 15th Annual West Virginia Fire School will be held July 23 to 26, at Morgantown.



FWD's FIRST

In Speed
In Safety
In Power

QUICK, POSITIVE, EMERGENCY STOPS

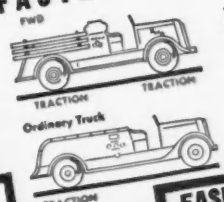


FWDs have two separate and independent four-wheel braking systems, with brake drums on each wheel . . . a distinct advantage that is another of many reasons why hundreds of fire departments depend upon FWDs for efficient, safe fire-fighting apparatus. FWDs' two super-braking systems on all four wheels, in addition to properly balanced weight distribution to all four wheels, provide the most effective braking ability possible. The best buy in fire trucks is FWD. WRITE FOR LITERATURE.

THE FOUR WHEEL DRIVE AUTO COMPANY • CLINTONVILLE, WIS.
Canadian Factory: Kitchener, Ontario

FWDs Go Where Other Vehicles Fail
NO ROADS TOO TOUGH OR STEEP FOR FWDs

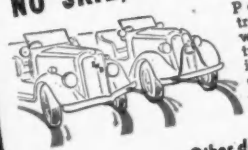
FASTER GET-AWAY



FWD power on all four wheels gets a four-way grip on any road and assures faster get-away.

Other designs, lacking drive on front wheels, lose time in get-away.

NO SKID, NO SLIP, NO SLUE!

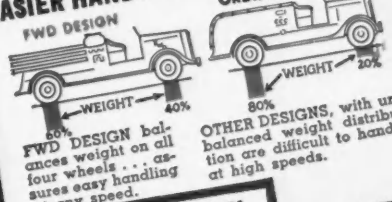


Powered steering traction holds front wheels to direction of turns, thus minimizing skid-danger. Skidding tests conducted on ice show 50% less skidding.

FWD . . . non-skid.

Other designs more liable to skid.

EASIER HANDLING AT HIGH SPEEDS

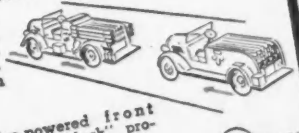


FWD DESIGN balances weight on all four wheels . . . assures easy handling at any speed.

OTHER DESIGNS, with unbalanced weight distribution are difficult to handle at high speeds.

GREATER HILL-CLIMBING ABILITY

FWD's front wheel pulling power increases hill-climbing ability. Reserve traction in all 4 wheels.



Non-powered front wheels "block" progress of truck on inclines, reducing steep hill-climbing ability.

FWD

FOUR-WHEEL-DRIVE *Fire Apparatus*

GETS TO FIRES FASTER and SAFER!

NOW AVAILABLE!

Regular Fireman's Boots available ¾ length, reinforced instep, felt linings. New synthetic rubber, not reclaimed.

MIDWESTERN FAMOUS COMBINATION SUIT

Midwestern protective clothing is manufactured exclusively for professional firemen and policemen all over America. A great part of this protective clothing is used by government aid plants and is becoming more popular each year because of the rugged, extra durable materials used. The needs of our fighting forces come first, of course, but the same fine quality is available for you. Write your Midwestern representative for complete information and samples of material now available or write the factory direct.

OUTFIT NO. 101

Combination suit in either rubber or canvas. Can be bought separately. Detachable wool linings. Flexible elastic inner sleeve to keep out water, cold and sparks. Sturdy construction. Bunker Pants have reinforced crotch for pole sliding. Write today.

MIDWESTERN GARMENTS

MIDWESTERN MFG. CO.

MACKINAW, ILLINOIS

FEDERAL ELECTRIC COMPANY, INC.

SIREN HEADQUARTERS

How

POWER

is built into this

FEDERAL

***Traffik-King* SIREN**

Oscillating Red Light;
Single or Double Tone; Coaster Model

The tremendously powerful tone of Federal Traffik-King sirens demands attention over other traffic noises, clears the way. This model has a distinctive double tone; and it coasts almost two minutes after current is off. Special clutch mechanism releases rotor; coasts much longer than so-called "long roll" types, which seldom roll over 30 seconds. Electric solenoid brake on rotor stops sound instantly. Durably built for long, dependable, maintenance-free service.

Rotors: cast aluminum, precision-machined, individually balanced. Thin, smooth blades for high efficiency.

Ports in rotor and stator accurately spaced, finished to square sharp edge; assure true pitch, powerful tone.

Motors: heavy duty; bronze or ball bearing; 6 or 12 volts.

WRITE for FREE BULLETINS

Details, illustrations, prices, on this and other FEDERAL Sirens

8717 SOUTH STATE ST., CHICAGO 19, ILL.

Suggestions for a Pumper Drill

(Continued from Page 14)

If it doesn't show a vacuum, he should stop and look for his trouble.

Here are a few things that you can do to stop him from getting water:

1. On either a rotary or centrifugal, take the cap off the opposite side from the suction and lay it on the running board. This was done at a fire and it was some time before the trouble was located.
2. On a rotary pump, close the discharge gates on both sides.
3. On either, open the drain valves.
4. On either, loosen the suction connections, so they leak air.
5. On a centrifugal, open the discharge gate. This pump is not supposed to prime with it open. If you have been pumping and there is water in the hose, the operator may get water in spite of this valve being open. It has been done many times on a shallow draft.
6. On a rotary, open the by-pass or churn valve.
7. On either, lift the suction strainer up so it takes air.
8. After the water is low in the booster tank, leave the valve in that line open and it should cause trouble with air leaking in.
9. On a centrifugal, try leaving the valve in the booster line open. If the line is dry so that the pump takes in air through the booster hose, he won't get any vacuum on the compound gauge.

While you have the pump set up, try closing the nozzle slowly and opening it the same way. That should be impressed on the boys very strongly, as they can get hurt very easily if they don't.

Sometimes we come out with our suction from the pump, up over the side of a bridge, then down to the water. Try to avoid this, as the air pocket in the suction hose will cause trouble many times. Have it come out and drop as directly as possible to the water.

Our pumps pass an underwriter's test before we accept them, and they are pumped at 120 pounds for the capacity test. When the next test is run at 200 pounds pressure, we only get one-half the capacity. Then at 250 pounds it is one-third of the water that we got on the capacity test. Some cities in their specifications ask for capacity at higher pressures.

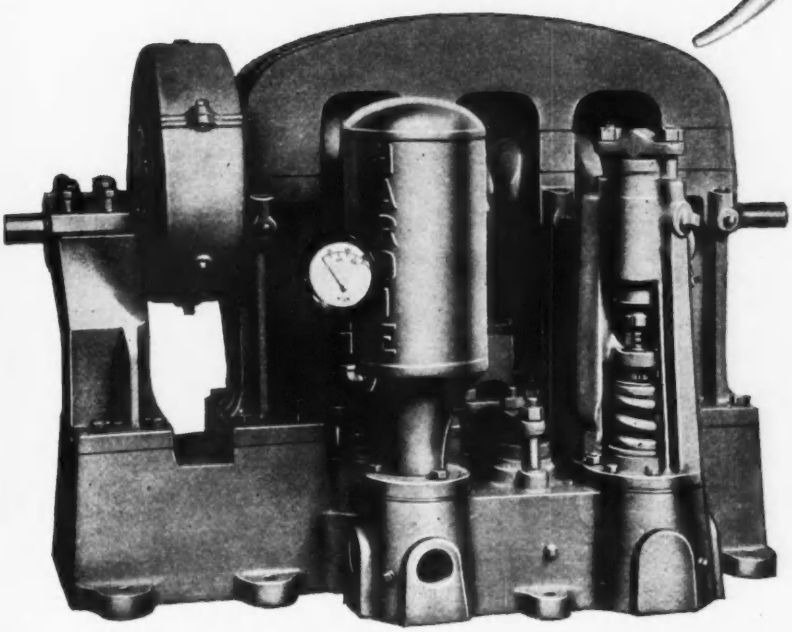
Pumping through the booster line sometimes bothers the men, as they think that opening the valve to the tank and the one to the reel are enough to get water just by putting the pump in gear. With a piston or rotary, yes; but with a centrifugal we get air pockets. It should be primed just the same as if pumping from draft, to be sure of water.

In the summer, if you care to leave water in the pump, the centrifugal can be primed by opening the valve to the tank and one of

(Continued on Page 24)

● *The Hardie Fog Gun provides easy one-hand, single-trigger control and adjustment of discharge from a blasting solid stream to a true fog.*

The Pump and The Gun...



● Hardie pumps for Fog Fire Fighters are available in two sizes. The Hardie L C X A (at left) delivers 60 gallons per minute at 800 P.S.I. at 130 R.P.M. The Hardie XCXX delivers 35 gallons at 800 P.S.I. at 118 R.P.M.

● Efficiency of any Fog Fire Fighter depends squarely upon the pump and the gun. Hardie offers perfected, proved quality in these two basic factors. Hardie pumps give you 800 P.S.I. for long, sustained periods without excessive wear of operating parts. The Hardie Fog Gun delivers a true fog—the finely atomized spray that makes this new method of fire control most successful.

Hardie pumps and guns are embodied in the Fog Fire Trucks built by leading manufacturers of fire control equipment. Specify a Hardie pump and gun when you buy a new truck or convert an old one into a Fog Fire Fighter. The Hardie Mfg. Company, Hudson, Michigan; Los Angeles, California; Portland, Oregon. Canadian Distributor—C. W. Lewis, Grimsby, Ont.

★ H ★ A ★ R ★ D ★ I ★ E

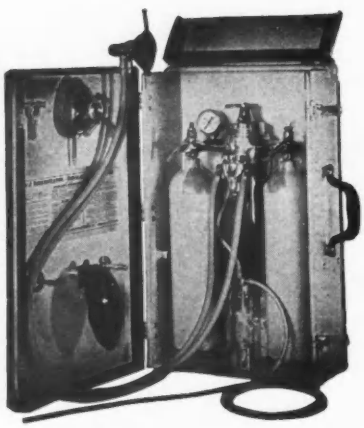
High Pressure PUMPS AND FOG GUNS for Fog Fire Fighters

E & J RESUSCITATORS SPECIALLY DESIGNED FOR DESPERATE CASES

•

These pioneer automatic breathing machines are designed to revive the most critical non-breathing cases. An outstanding record of lives saved is their guarantee of proven merit.

•



NO BODILY PRESSURE NECESSARY

In cases where breathing has stopped, the E & J Resuscitator automatically inhales and exhales for the patient. Internal injuries, severe burns, fractured ribs or pregnancy are not impediments to efficient and successful artificial respiration when this modern scientific instrument is available.

YOUR RESCUE SERVICE IS NOT COMPLETE WITHOUT MECHANICAL RESUSCITATION — AND THIS MEANS "E & J" IF YOU WANT THE BEST

E & J MANUFACTURING CO.
GLENDALE, CALIFORNIA
Pioneers and Specialists in Mechanical Artificial Respiration

Drexel Bldg. Philadelphia | 17 E. 42nd St. New York | 2144 N. Springfield Ave. Chicago | 581 Boylston St. Boston
530 Fernando St Pittsburgh | 3032 W. 25th Ave. Denver | 3900 Grandy Ave. Detroit | 5005 Euclid Ave. Cleveland

Suggestions for a Pumper Drill

(*Continued from Page 22*)

the discharge valves. If the pump is constructed so that the discharge is higher than the suction inlet, the water will flow into the pump. When it comes out the discharge gate, hold your hand over it till the pump is full. Close the discharge gate and the impellers will be covered with water, and should give pressure just by putting the pump in gear.

Here's a "don't" that may save you trouble: never let the men stand in front of the discharge gates on tests like these. The caps have been known to blow off when there was a slight leak through the discharge gate itself.

It is so necessary that the chief has a good operator on the pump that training cannot be stressed too much. It takes a headache away from the chief if he knows that one thing he does not have to worry about at a fire is the pumps.

Before we quit this subject, or you leave the fire house after pump drill, how about checking that pumper for the grease and the packings. Are they all tight? Is there priming oil in the tank on those jobs that use oil in the sealing of the priming pump? How about oil in the motor? Is there any gas in the tank? Have you made everything all set for the next job? Then it's time to go home.

★ ★ ★

U. S. Forest Official Describes Jap Balloon Attacks

(*Continued from page 11*)

travels across the United States. When the last incendiary is dropped, a fuse ignites automatically and sets off a demolition charge which destroys the balloon.

"They travel up to 125 miles an hour and take from 80 to 120 hours to make the crossing.

"The Japs have been using these balloons for home-front propaganda. They take a couple of the balloons to a war factory, make a lot of speeches, stir up the workers to a frenzy and they launch the balloons from the war plant for their trip to the United States.

"The Forest Service has increased its air patrol to sight as many as possible in the air and shoot them down. And we have increased our parachute jumpers who land to control fires. There's a last point I'd like to bring out. We are less worried about this Japanese balloon attack than we are with matches and smokes in the hands of good Americans hiking and camping in the woods. We must protect our timber."

TANK TRUCK WANTED

Wanted—1,000 gallon tank truck suitable for rural fire fighting. Clio Fire Department, F. J. Sturdivant, Secretary, Clio, Michigan.

Our Readers Say—

Dear Mr. Kimball:

You will be interested to know that all of the WPB Limitation Orders covering safety equipment and nearly all of the orders covering fire protective equipment have now been revoked. I refer to Fire Protective Equipment (L-39); Motorized Fire Apparatus (L-43); Fire Protective and Alarm Equipment (L-39); Automatic Sprinkler Equipment (L-39 and L-39a); Fire Windows (L-77); Fire Doors and Fire-Resistive Vault Doors (L-142); and Safety Equipment (L-114).

This does not mean that items which have been scarce will be available immediately because it will take some time for reconversion and to procure materials. As a matter of fact, control over the use of certain materials will continue to be exercized by Conservation Orders which are still in effect for all industries.

A. O. BONIFACE.

[The control orders with the "M" prefix controlling rubber, cadmium, and tin are still in effect and the manufacturers are also subject to priorities' regulations, Controlled Materials Plan regulations and other general orders. — ED.]

A. O. BONIFACE, *Executive Secretary*,
Industrial Safety Equipment Assoc.

FOR YOUR INFORMATION

Flame Facts, a 16 mm. sound motion picture, has just been made available to all types of non-theatrical film audiences by the Princeton Film Center, New Jersey.

Designed to teach the correct use of fire extinguishers in an emergency, this 20-minute film, in full color, explains how to determine the three main types of blazes and how each can be extinguished most effectively.

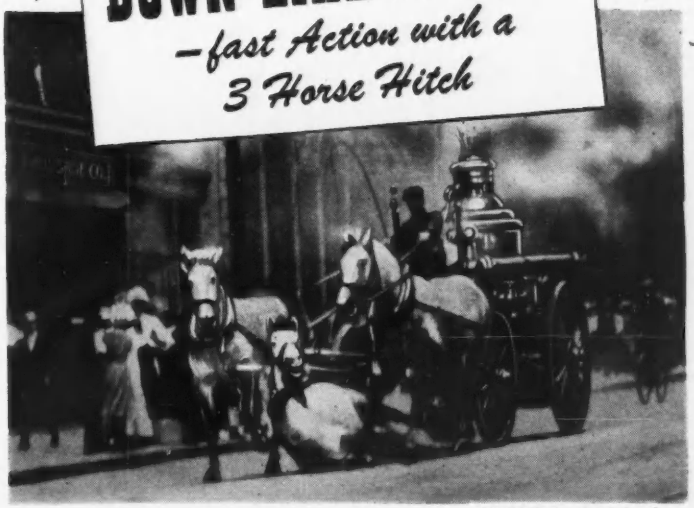
Flame Facts is a valuable fire prevention aid for schools and colleges; hospitals, hotels and public building employees; fire departments, clubs industrial plants and other adult groups.

For further details, write to the Princeton Film Center, Princeton, New Jersey.

Garden City Firemen Have Drill Manual

CHIEF WALTER W. BARNES of the volunteer fire department of Garden City, Long Island, New York, recently sent the editor of VOLUNTEER FIREMEN a copy of an interesting new drill manual distributed to the officers and men of his department. The manual, prepared by Captain Sidney R. Parker, includes drill outlines utilizing each piece of apparatus in the department and also includes a diagram of each fire truck showing the location of tools or appliances. A questionnaire on the location of such equipment is included in the drill outline.

DOWN LIKE A SHOT!
—fast Action with a 3 Horse Hitch



UTICA, 1904

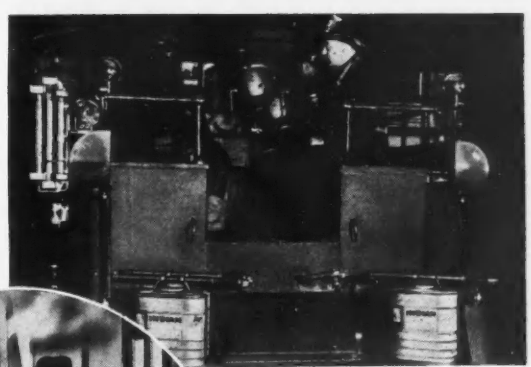
This old photo, taken in Utica over 40 years ago, shows a dramatic moment when the center fire horse stumbled and fell while galloping down the main street. It was up in a flash, however, and continued the run.

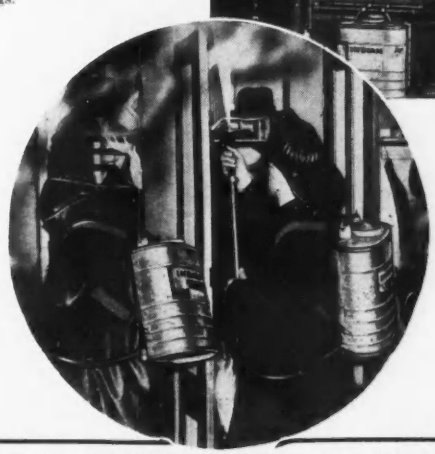
INDIAN FIRE PUMPS
Never Fall Down on the Job!

Utica Fire Dept. now has INDIANS as Standard Equipment.

(*At right*) This Utica fire truck is one of many which carry **INDIAN FIRE PUMPS** for fighting all types of smaller fires.

(*Below*) Utica firemen use **INDIAN FIRE PUMPS** to extinguish a fire in a home. Clear water causes no damage to clothing or furnishings.





"GREAT PIECE OF EQUIPMENT"

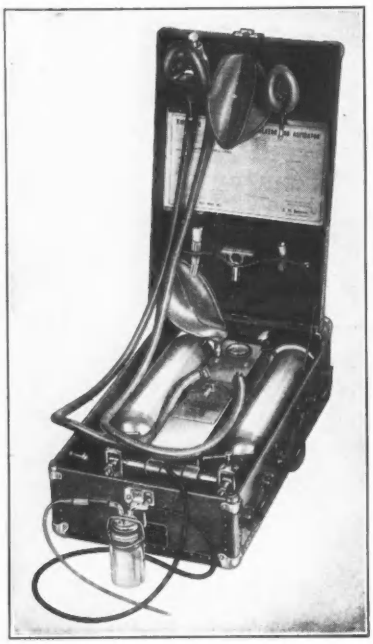
Our **INDIAN FIRE PUMPS** again saved a building. Fire got a good start in the dry wood shingled roof of a house 5 miles from our station. We put up a ladder and 2 men went on the roof with their **INDIANS** and 2 others up in the attic with **INDIANS.** We had it out in a hurry. The **INDIAN** is a great piece of equipment.

Chas. M. Levering,
Fire Chief
LaPlata Volunteer
Fire Dept.

D. B. SMITH & CO., 411 Main St., UTICA 2, N.Y.

Pacific Coast Branches: Hercules Equipment & Rubber Co., 435 Brannan St., San Francisco, Cal.
Roy C. Davis Co., 617 East Third Street, Los Angeles 13, Cal. Mill & Mine Supply Co., 2700 4th Avenue, South Seattle, Washington
Carco-Conwhit Co., 520 SW Pine Street, Portland 4, Ore. The Conwhit Co., Klamath Falls, Oregon

When Life Hangs by a Thread



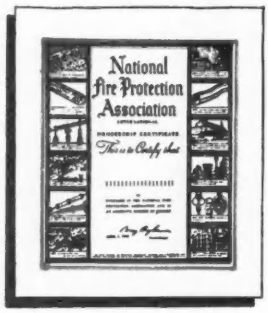
The EMERSON RESUSCITATOR

is your best insurance against preventable asphyxial death. Don't take chances. Insist on the best! Let us demonstrate to your department.

•

J. H. EMERSON CO.
24 Cottage Park Ave.,
Cambridge, Mass.
Representatives in Principal Cities

N. F. P. A. Volunteer Firemen's Section
MEMBERSHIP REPORT



MEMBERSHIP PLAN

- Through the Volunteer Firemen's Section, fire companies may become members of the National Fire Protection Association. As a member fire company, the department receives at headquarters a set of all regular N.F.P.A. publications. This includes the Quarterly, the monthly News Letter, posters and bulletins.
- Each member fire company has the Volunteer Firemen magazine sent to the homes of ten men at no extra charge beyond the ten dollars annual dues paid by all associate members of the N.F.P.A. All other N.F.P.A. members pay ten dollars without the ten copies of Volunteer Firemen.
- If more than ten firemen want to receive Volunteer Firemen, an additional dollar should be sent for each extra fireman listed to receive the magazine. Individual subscriptions are not accepted from departments not members of the N.F.P.A.

THIS month, 20 new companies joined the ranks of the Volunteer Firemen's Section. For those who are interested in the steady growth of membership in the Section, the Editor releases these figures from the membership charts.

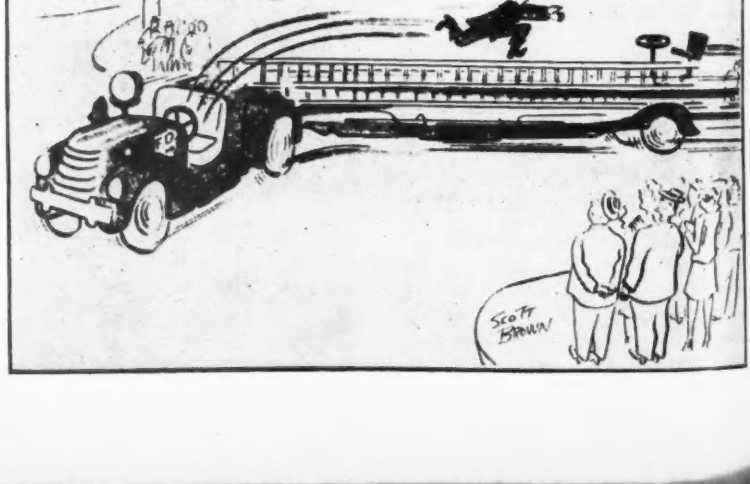
In July, 1941, 732 companies were listed. July, 1942, had not moved far with an increase to 754 companies, but by 1943, 857 companies were section members. In 1944 the figure had leaped to 1,078 and this year the N.F.P.A. Volunteer Firemen's Section has 1,221 member companies.

NEW MEMBERS

Parlier Volunteer Fire Dept., Parlier, Calif.
Bartlett Fire Dept., Bartlett, Ill.
Bloomingdale Volunteer Fire Dept., Bloomingdale, Ill.
Phoenix Fire Dept., Phoenix, Ill.
Princeton Fire Dept., Princeton, Iowa
Wm. Hill Engine Co., North Berwick, Maine
Aberdeen Proving Ground, Md.
Chestertown Volunteer Fire Co., Inc., Chestertown, Md.
Bloomfield Village Fire Dept., Birmingham, Mich.
Lake Orion Fire Dept., Lake Orion, Mich.
Mason Volunteer Fire Dept., Mason, Mich.
Richfield Volunteer Fire Dept., So. Minneapolis 9, Minn.
Olmsted Falls Fire Dept., Olmsted Falls, Ohio
Buck Hill Falls Co., Buck Hill Falls, Pa.
Columbia Fire Co., No. 1, Roseto, Pa.
Martinsburg Volunteer Hose Co. No. 3, Martinsburg, W. Va.
Germantown Volunteer Fire Co., Germantown, Wis.
Banff Volunteer Fire Brigade, Banff, Alberta, Can.
New Glasgow Fire Dept., New Glasgow, N. S., Can.
Kindersley Fire Brigade, Kindersley, Sask., Can.

VARIOUS United States departmental agencies have become N.F.P.A. members recently. These include the departments of War, Navy, Agriculture and Interior. The Navy Department has designated the Bureau of Yards and Docks as their N.F.P.A. contact. This is very appropriate in view of the outstanding contribution to fire protection made by this bureau during the war.

"I understand that the chief hopes to find another man with 85 points."



Let's Get Acquainted

(*Continued from page 11*)

CARROLLTON Have an organization and social activities. Membership is optional with the men, but about 50 per cent belong.

CADIZ Community Volunteer Fire Department visits other fire departments of the county as well as small civic clubs, show movies and study fire problems.

BATH TOWNSHIP Fairfield Fire Company promotes good will by having suppers, lunches, flooding playgrounds for ice skating.

GRANDVIEW HEIGHTS Civilian Defense organization meeting every two weeks.

MIAMISBURG Gives annual treat to children under 12 years of age, including box of candy and an orange, generally about 1,250 children attend, partly financed by Bingo.

NAVARRE Instruction in first aid and home safety.

NEWBURGH HEIGHTS Have social organization.

SAWYERWOOD Christmas parties for children and all civic activities, and also trained Civilian Defense firemen.

TRILBY Members of several fire organizations, organized to promote better fire fighting methods, annual field day held to compete for prizes.

UTICA "Setting up overturned back houses after Halloween."

OKLAHOMA

BETHANY Luncheons.

EDMOND Teaching first aid classes, public demonstrations, civic clubs, Boy Scouts and Civilian Defense corps.

OREGON

McMINNVILLE Community Christmas party for children, annual deer hunt, annual fishing derby, sponser women's ambulance corps.

PENNSYLVANIA

ALBION Handles Civilian Defense program for entire district and takes part in all community activities.

BARRETT TOWNSHIP Social gatherings of firemen and families held monthly with varied entertainment.

CHERRY CITY Community socials and welfare, OCD disaster units.

DOVER Chicken corn soup suppers during summer months.

NORTH HILLS Edge Hill Fire Company sponsors bowling, baseball, darts, quoits, etc. Yearly banquet with noted guests.

FOGELSVILLE Emergency water hauling, pumping of cellars, cisterns.

SPRING GROVE Friendship Hose Company No. 1, as inducement for better attendance at meetings, serves refreshments paid for each time by donations of members attending.

NEW KENSINGTON Ambulance service to community with average of 600 trips per year. (Reported in VOLUNTEER FIREMEN, May 1944.)

PENN WYNNE OVERBROOK HILLS Dance each year and annual banquet.

RICHLANDTOWN Banquets and card parties.

STOWE West End Fire Company No. 1 is leader in most community affairs.

STOWE TOWNSHIP West Park Independence Fire Company assists the town at community affairs.

WASHINGTON

SUMNER Annual dinner, strawberry feed, dance, active in State and Puget Sound Association activities.

WEST VIRGINIA

KINGWOOD Sponsors a county fair known as Buckwheat Festival.

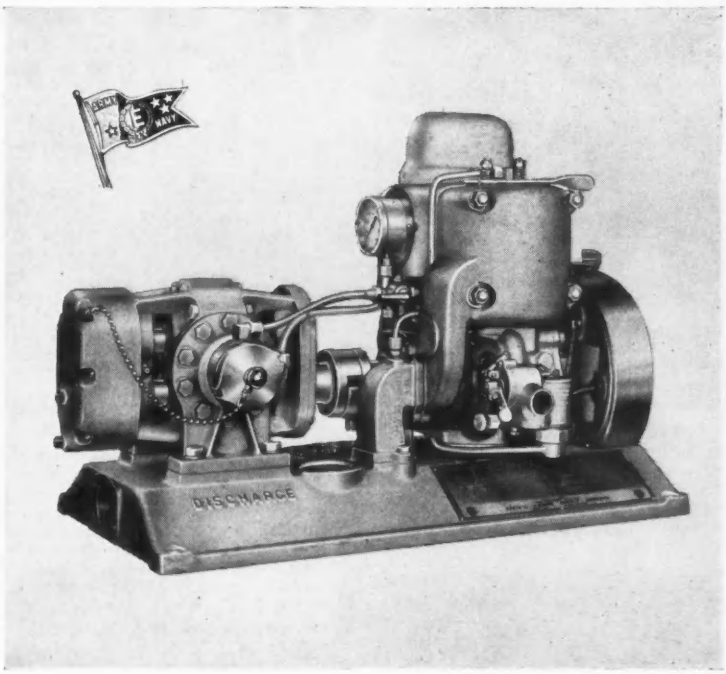
WISCONSIN

BUTLER Annual dance, summer carnival, Christmas party for children of fire department members.

WYOMING

RAWLINS All members have had blood typed and recorded at hospital for emergency transfusions.

TYPE "Y"
Portable Pumper



While the major part of our manufacturing effort still is confined to production for the Navy, we once again are able to produce a limited quantity of our highly specialized fire-fighting Type "Y" Portable Pumpers for the forestry service, industrial plants and commercial shipping.

For weight and size, Pacific Marine Type "Y" is the most powerful portable pumper yet built. Base, 24 x 12 inches; height, 13 inches; net weight complete, ready to operate, 70 pounds.

CAPACITY

Pressure	100	125	150	175	200	225
Gallons per Minute	63	59	53	46	40	20

Manufactured by the

FIRE-FIGHTING EQUIPMENT DIVISION *of the*

PACIFIC MARINE SUPPLY COMPANY

SEATTLE, Washington

Fyr - Fyter equipment has proven its value in preventing small fires from becoming disastrous through the loss of life and property. Recent catastrophic fires with terrific loss of life emphasizes the urgent need of fire protection. A complete line of Underwriters Laboratories Labeled Fire Extinguishers.

HELP SAVE LIVES AND PROPERTY

Get Fyr-Fyters for safety's sake. We advise and serve war production plants, public institutions, etc., immediately. Write us today regarding Fyr-Fyter equipment for your own protection.

THE FYR-FYTER CO.
Dept. 20
DAYTON 1, OHIO

ARMY (E) NAVY — WAR BONDS

Fyr-Fyter

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When you write to advertisers, please mention VOLUNTEER FIREMEN

MANUFACTURERS' ANNOUNCEMENTS

Pressurater Helps Pump Operators

The Barton Instrument Company, 2306 East 38th Street, Los Angeles 11, California, has issued a four-page illustrated bulletin describing its No. 171 Nozzle Pressurater. This Pressurater eliminates most of the headaches of pump operators and fire officers who have to compute hydraulic data at a fire in order to get the correct nozzle pressure. Regardless of the length of the line or elevation of the nozzle, the operator can always give the desired pressure called for by merely knowing the size nozzle tip in use. The Pressurater is designed for permanent installation with each discharge gate of the pumper. It records the velocity of the flow through the discharge fitting and converts this information into the nozzle pressure actually available at the nozzle. Where Pressuraters are installed a lot of leg work will be saved between the "pipe" and pump operator. The officer merely has to tell the operator the pressure he wants and the size of nozzle he is going to use and all guess work is eliminated.

●

Carpenter Mfg. Moves to New Building

The Carpenter Manufacturing Company, formerly of Cambridge, Mass., has moved its offices, showroom and factory to its own new building, the Masterlight Building, post office address: Boston 45, Mass. The new building provides much needed space and permits tripling their production of portable lighting equipment of all types. A few of the 70 models produced by this company are illustrated on page 13.

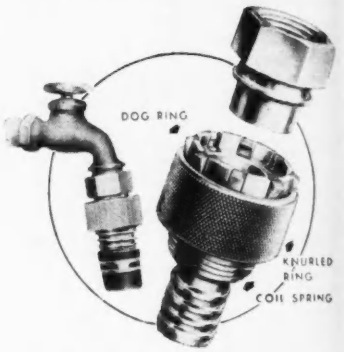
●

Atlas Offers New Catalog

The Atlas Safety Equipment Company, Inc., 26 Warren St., New York 7, has recently released a new and attractive catalog embracing its wide line of life nets, safety belts and other equipment. Fire department officers may obtain a copy on request to the company.

New Quick Coupling for Garden Hose

A new type of coupling adaptable for water faucets in industry and for commercial use has been announced by the E. B. Wiggins Oil Tool Company, 3424 West Olympic Blvd., Los Angeles, Calif.

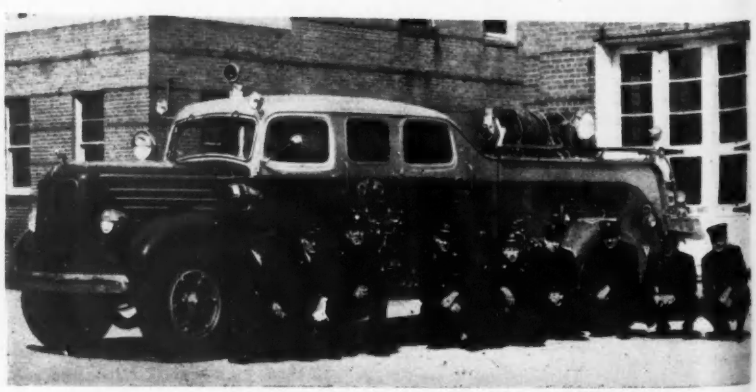


These couplings may be connected or disconnected in a matter of seconds. They are presently available in $\frac{5}{8}$", $\frac{3}{4}$", and 1" sizes and are made of durable light-weight aluminum. From the description and illustration of this new device it appears that with some minor modification, it might offer some advantages for use with booster hose.

●

Production of Red Star Extinguishers Resumed

The General Detroit Corp., manufacturers of fire extinguishers and other fire fighting apparatus, announces that production is being resumed on its pre-war copper finish soda-acid and foam type extinguishers. Discontinued early in the war because of material shortages, Red Star Soda-Acid and Floafome Foam Type extinguishers will be available early in July. Descriptive literature may be secured by writing the company, 2270 East Jefferson Ave., Detroit 7, Mich., or the General Pacific Corp., 1800 South Hooper St., Los Angeles 21, Calif.



Pride of the Fire Department of Lincoln Park, Mich., is its Mack Type 80, 750-gallon triple combination pumper. Seven men ride comfortably within the inclosed four-door, sedan-type cab. Special aluminum ladders and extra-long wheelbase are other features of this pumper. Lined up in front are left to right: J. N. Howard, Mayor; O. A. Hand, Fire Chief; W. E. Hayward, Assistant Engineer; J. L. Hatfield, Captain; W. J. Borne, Lieutenant; Harold Fisk, Engineer; Ernest Dalyes, Pipeman; Charles D. Downey, Pipeman; George Rushlow, Engineer.

AKRON UNIVERSAL SPANNER WRENCHES

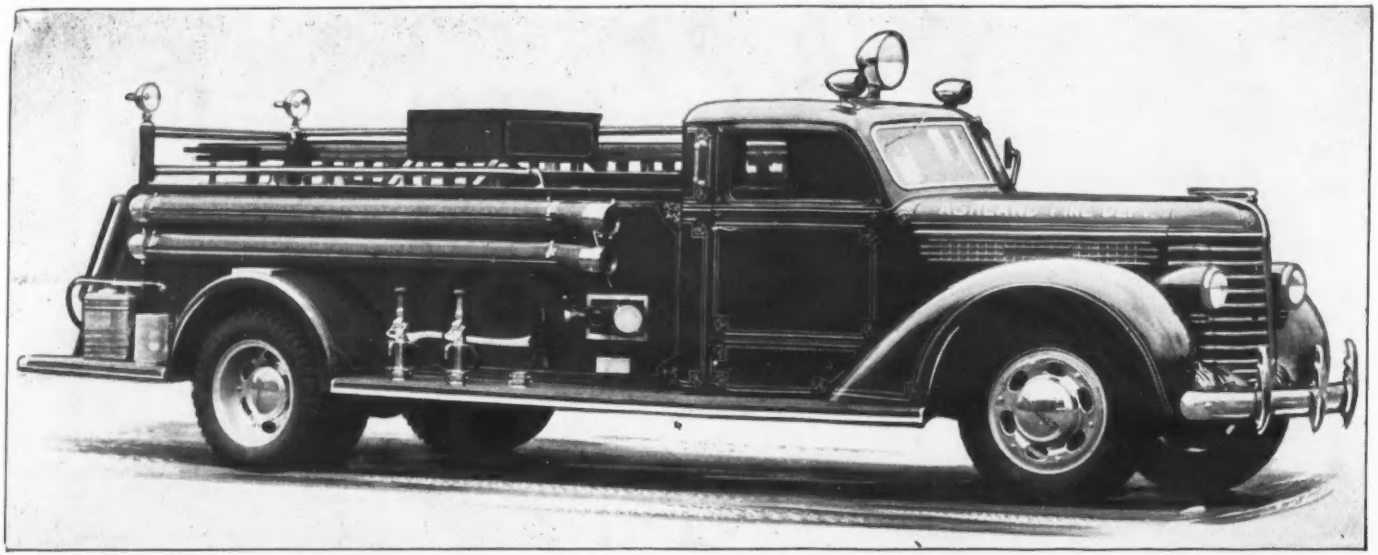
OFFERED in a large variety of styles, Akron Spanner Wrenches provide some of the handiest, most efficient tools carried on fire apparatus. Universal Spanners give you the advantage of fitting all sizes of couplings in Pin Lug, Rocker Lug, Roll Pin, Navy Slot and other types.

The Akron line contains nearly 20 different types of Spanner Wrenches some of which are Combined Spanners, Ladder Hooks and Hydrant Wrenches. They serve you handily in many ways and save precious time.

AKRON BRASS MFG. COMPANY, INC.
WOOSTER, OHIO

AKRON BRASS
FIRE FIGHTING EQUIPMENT

CHAMPION FIRE APPARATUS AVAILABLE WITHOUT PRIORITY



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ARMY E NAVY

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OF FIRE EQUIPMENT

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W. S. DARLEY & CO. ILLINOIS

SODA-ACID EXTINGUISHER

Red Star

DRENCHES FLAME UNDER PRESSURE

Speed is the keynote of Red Star extinguishing action. A strong stream, driven by chemical pressure, is released immediately when the extinguisher is inverted. It has an effective range of 40 feet. Red Star is constructed with exclusive Sure Sweat seam, is easy to use, has no moving parts to get out of order.

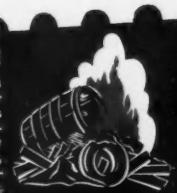
AVAILABLE AT LAST!

The extinguisher you have been waiting for—in lustrous polished copper!

WHERE TO USE

Underwriters approved for use on Class A fires, specifically against paper, wood, rubbish, textile, and similar materials.

★



HOW TO USE

Direct nozzle; invert extinguisher. Aim stream at base of flames, gradually working upward. Discharge completely.

★

IF IT'S GENERAL IT'S DEPENDABLE

The General Protectioneers prescribe the right extinguisher for your every fire hazard.

THE GENERAL DETROIT CORP.

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Deadly to fire . . . and only to fire!

It's sudden death to flames, of course — in flammable liquids or electrical apparatus — but that's just *one* of the outstanding advantages of Kidde equipment.

Equally important: dry, inert carbon dioxide gas — the fast, sure extinguishing agent used in Kidde equipment — is *completely harmless* to materials and machines.

Carbon dioxide gas cannot contaminate or dilute valuable liquids. Used on electrical fires, it will not soften or water-soak insulation. It's a non-conductor too — there's no danger of short circuits, or of shock to the operator. And there's no after-fire mess to be cleaned up.

Kidde portable extinguishers for small, isolated blazes in flammable liquids and electrical equipment; wheeled units and built-in systems for major hazards — all are deadly to fire, and *only* to fire. The Kidde line includes the *right* kind of protection for every tough-fire hazard in the accompanying list . . . ask a Kidde representative for full information — he's skilled in the ways of fire protection.

* * *

KIDDE KILLS TOUGH FIRES *in Process Rooms, Ovens, Spreaders, Motors, Storage Rooms, Mixers, Coaters, Transformers, Dip Tanks, Agitators, Washing Trays, and Control Panels.*

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